

## SHOCKS, COPING, AND HOUSEHOLD LIVELIHOOD STRATEGIES IN WARTIME

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Since the eruption of conflict between the Sudanese Armed Forces (SAF) and the Rapid Support Forces (RSF) in April 2023, Sudan has experienced one of the most severe humanitarian and economic crises in recent history. Beyond the tragic toll in lost and displaced lives, the conflict has profoundly disrupted livelihoods, dismantled social safety nets, and eroded the foundations of food and income security across the country. The ongoing war has affected millions, displacing communities and decimating livelihood systems across both rural and urban areas.

This aligns with evidence from other conflict-affected contexts showing that wars erode human capital, restrict market access, and reshape livelihood strategies in ways that persist long after violence subsides (Justino 2012; Brück et al. 2019). Research has further shown that households adopt coping mechanisms that may stabilize consumption in the short term but risk undermining long-term resilience by depleting assets or disrupting education and health investments (Dercon 2004; Carter and Barrett 2006). Yet, much of this literature has focused on rural contexts, with limited attention to the distinct vulnerabilities of urban households or to gender-differentiated strategies. Sudan thus provides an important and timely case to deepen understanding of how shocks are absorbed and livelihoods are adapted in protracted conflict settings.

Conflict affects livelihoods through multiple, often overlapping pathways: destruction of assets and infrastructure, loss of employment, displacement, market disruptions, and weakening of state and community institutions. These shocks often compound existing vulnerabilities such as poverty, gender inequality, and environmental degradation.

This chapter examines exposure to shocks and the coping and livelihood strategies adopted by households in Sudan during the conflict. We explore patterns of vulnerability, household responses to acute and protracted shocks, and institutional support mechanisms, providing a comprehensive perspective on resilience in the face of crisis. The analysis is based on household-level data from IFPRI's 2023–2024 Rural and Urban Household Surveys (IFPRI and

UNDP 2023; 2024), supplemented by secondary data from United Nations (UN) agencies, nongovernmental organizations (NGOs), and insights from the 2025 Sudan Resilience Conference.

Because coping strategies vary significantly between rural and urban households in Sudan, we present results both in aggregate and, where relevant, separately for rural and urban samples. Rural households are typically engaged in subsistence farming and small-scale trade, making them more vulnerable to disruptions in agricultural production and input availability. Urban households, by contrast, depend heavily on market purchases and wage labor, and are therefore more exposed to inflation and market price shocks. To ensure clarity, each figure and table specifies whether results are rural, urban, or combined, and transitions between rural and urban findings are highlighted explicitly in the text.

In Section 2, we discuss conceptual linkages between resilience, vulnerability, and livelihoods. Section 3 discusses the findings from our analysis of the data: it begins by summarizing data on household exposure to shocks, then follows with our analysis of coping mechanisms and livelihood strategies. The last section presents conclusions and policy recommendations.

## **Conceptual linkages: Resilience, vulnerability, and livelihoods**

Resilience is broadly understood as the capacity of individuals, households, and systems to absorb, adapt, and recover from shocks without compromising long-term well-being (Walker et al. 2004; Folke 2006). In development practice, resilience is often framed around three interrelated capacities: absorptive capacity (ability to withstand and buffer shocks), adaptive capacity (ability to make incremental adjustments), and transformative capacity (ability to create systemic change that reduces vulnerability in the long term) (Barrett and Constanas 2014). In fragile contexts such as Sudan, these capacities manifest in everyday practices like food rationing, informal trade, and reliance on remittances. Yet, as research on coping in conflict settings shows, these strategies often blur the line between short-term stabilization and “erosive coping,” which depletes assets and undermines future resilience (Maxwell et al. 2013).

Vulnerability, in contrast, is best conceptualized as a multidimensional condition shaped by exposure, sensitivity, and capacity to respond (Chambers 1989; Cutter et al. 2003). In Sudan, overlapping political, economic, and environmental stressors have created a particularly acute vulnerability context (de Waal 1989). Gender inequality, displacement, and the prevalence of informal

employment compound these risks, leaving certain groups (especially female-headed households, youth, and displaced populations) disproportionately exposed. These dynamics are consistent with broader evidence that conflict-affected households face not only income shocks but also structural barriers that constrain their coping options and recovery trajectories (Justino 2012; Brück et al. 2019).

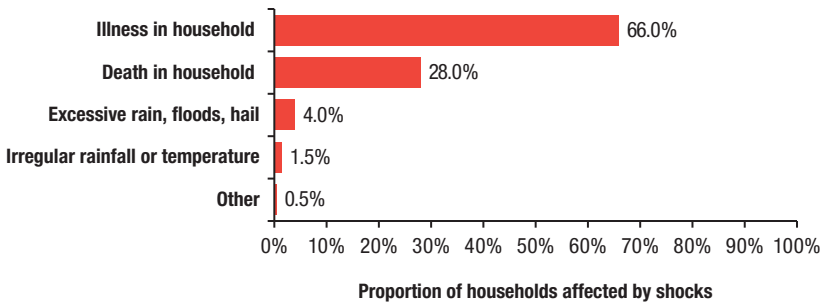
Livelihoods provide the operational lens through which resilience and vulnerability are experienced. The Sustainable Livelihoods Framework (DFID 1999) highlights how access to different forms of capital—natural, financial, human, social, and physical—shapes the strategies households adopt to achieve their goals. In conflict settings, these assets are systematically eroded: land is abandoned, markets disrupted, and social networks fragmented. Sudan is no exception. Rural households shift toward low-input, fast-growing crops; liquidate livestock; or migrate for work, while urban households rely on wage labor, petty trade, and humanitarian assistance. Women dominate low-paid, informal livelihood activities such as food preparation and domestic services, reflecting both adaptation and exclusion.

In sum, resilience, vulnerability, and livelihoods form an interlinked framework for analyzing household responses to conflict. Shocks reshape the asset base, coping strategies influence resilience pathways, and socioeconomic inequalities mediate outcomes. Understanding these linkages is essential for designing policies that not only alleviate immediate hardship but also prevent the erosion of long-term resilience and inclusive development.

## **Findings from the current conflict in Sudan**

### **Exposure to shocks**

Households across Sudan have been exposed to a diverse set of shocks since the onset of the conflict, with clear variation between rural and urban contexts. In rural areas, just over half of respondents (51 percent) reported that at least one household member had been affected by one or more shocks. Health-related crises emerged as the most common, with two-thirds (66 percent) of affected households reporting illness and nearly one-third (28 percent) reporting the death of a family member. Climatic shocks—including excessive or irregular rainfall—also contributed to household stress, though they were cited less frequently than in previous years, reflecting both changing weather patterns and the overshadowing effect of conflict. Security-related shocks were also significant: theft was reported by 14 percent of rural households and direct violence

**FIGURE 11.1** Types of shocks experienced by rural households

**Source:** IFPRI and UNDP (2023); authors' calculations.

by 5 percent. These findings are consistent with evidence from other conflict-affected contexts, where households often face overlapping health, environmental, and security shocks that compound vulnerability and strain coping capacities (Justino 2012; Brück et al. 2019; Maxwell et al. 2013).

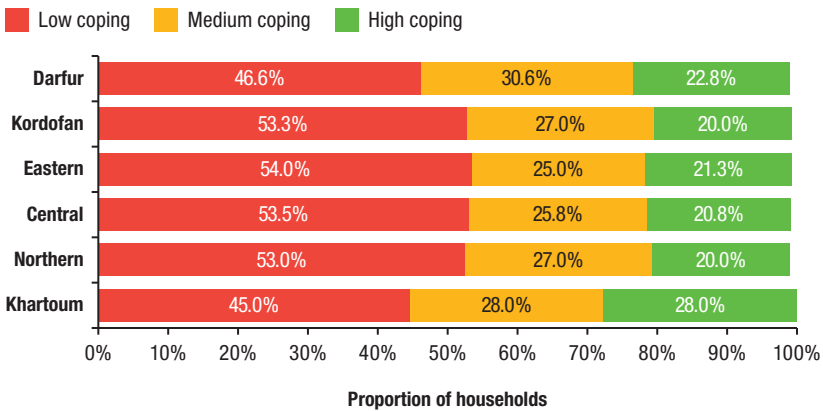
Figure 11.1 illustrates the distribution of these shocks, highlighting the predominance of illness and death. Table 11.1 presents a breakdown of the number of shocks experienced, revealing that 44 percent of households experienced one and about 7 percent faced two shocks. Only a small fraction reported experiencing three or more, suggesting concentrated vulnerability among certain groups. The table also shows the proportion of affected households who experienced each respective number of shocks, with the majority (86 percent) reporting only one type of shock.

Households headed by women or with larger family sizes were more likely to report multiple shocks, signaling greater exposure among already vulnerable

**TABLE 11.1** Number of shocks experienced by households

Number of shocks	Frequency	Households (%)	Households experiencing shocks (%)
None	2,198	48.8	–
One	1,971	43.8	85.5
Two	315	7.0	13.7
Three	16	0.4	0.7
Four	2	0.0	0.1
Five	1	0.0	0.0

**Source:** IFPRI and UNDP (2023); authors' calculations.

**FIGURE 11.2** Use of food-based coping strategies, by region

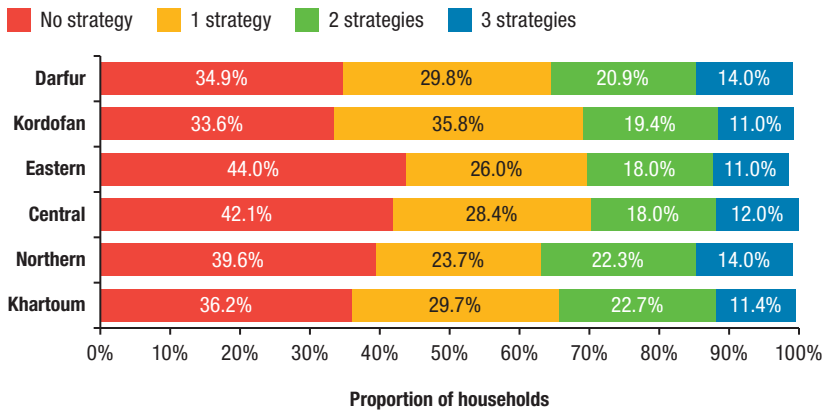
Source: IFPRI and UNDP (2023); authors' calculations.

demographics. In urban areas, the profile of shocks differed: 29 percent of households reported theft or street violence, 20 percent reported psychological stress due to insecurity, and 14 percent were directly affected by SAF–RSF confrontations. Disaggregated analysis shows that younger, less educated, and informally employed individuals were disproportionately impacted, which is consistent with evidence that urban households in conflict settings face distinct forms of vulnerability linked to labor market insecurity and exposure to violence in densely populated areas (Justino 2012; IDS 2015).

## Coping mechanisms and livelihood strategies

### FOOD-BASED COPING

In response to these shocks, food-related coping strategies were among the most immediate and widespread, especially in urban areas. Approximately 75 percent of urban households reported switching to cheaper or less preferred foods. More than half reduced the number of meals consumed per day or decreased portion sizes, while others relied on borrowing food from friends or neighbors. To protect their most vulnerable members, many households prioritized children's food consumption over that of adults. These strategies were especially prevalent in high-conflict regions such as North Darfur, where nearly one-third (32 percent) of households reported frequent use of food-based coping (Figure 11.2).

**FIGURE 11.3** Number of livelihood coping strategies used, by region

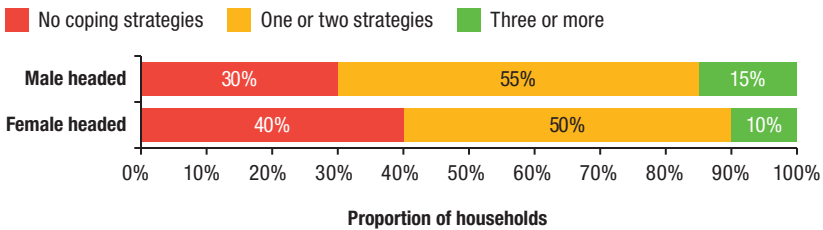
Source: IFPRI and UNDP (2024); authors' calculations.

#### ASSET-BASED AND INCOME STRATEGIES

Households also resorted to a range of financial and asset-related strategies to manage the economic impact of the conflict. In urban areas, 39 percent sold household items, while 27 percent sold productive assets necessary for income generation. Spending on health and education was also reduced by a significant number of households. In rural settings, the Livelihood Coping Strategy Index revealed that 35 percent of households did not adopt any coping strategy, while 50 percent adopted one or two. A smaller subset—15 percent—adopted three or more, including asset liquidation and migration for work. In West Kordofan, for instance, nearly 30 percent of households used multiple strategies, as seen in Figure 11.3.

Gender and socioeconomic status strongly shaped coping capacity. Female-headed households were generally less likely to adopt multiple coping strategies, either because they had fewer assets to liquidate or less access to external support systems. Figure 11.4 illustrates disparities in coping strategies by sex of the household head.

While regional variation was evident, household characteristics such as poverty status, displacement, and gender were more decisive in shaping coping responses (IFPRI and UNDP 2024). For example, poorer households across all regions were disproportionately reliant on severe food-based and asset-depleting strategies. Similarly, displaced and female-headed households consistently reported greater reliance on multiple coping mechanisms than

**FIGURE 11.4** Coping strategies by sex of household head, rural households

Source: IFPRI and UNDP (2023); authors' calculations.

their counterparts, underscoring the importance of socioeconomic and demographic targeting rather than purely regional approaches.

#### REMITTANCES, MOBILITY, AND COMMUNITY SUPPORT

In addition to food- and asset-based coping, households relied heavily on external support systems to withstand the shocks of conflict. One striking trend is the increased reliance on remittances, particularly in urban areas. The proportion of urban households receiving remittances rose from just 3.3 percent before the conflict to 14.1 percent during the conflict, reflecting the growing importance of transnational ties as a safety net (IFPRI and UNDP 2024). Remittances enabled families to meet essential expenses such as rent, food, and healthcare. This shift is consistent with evidence from other fragile contexts where remittances serve as a critical buffer during crises but remain unevenly distributed, often dependent on banking infrastructure and preexisting migration networks (Justino 2012; Brück et al. 2019).

Migration (both internal and cross-border) also emerged as a crucial livelihood strategy. Families sent members to safer regions or neighboring countries such as South Sudan and Egypt to seek work, while seasonal migration for agricultural labor increased. Such mobility-based coping strategies are well-documented in conflict settings, where households pursue both survival and opportunity through internal displacement or cross-border migration (Maxwell et al. 2013; IDS 2015).

At the community level, informal support networks played an equally vital role. Households drew on kinship ties, rotating savings groups, and food-sharing arrangements that provided relief where formal systems were absent. While these grassroots mechanisms are often modest in scale, they have proven essential for enhancing local resilience, echoing findings from

resilience literature that highlight the centrality of social capital in times of crisis (Chambers 1989; Barrett and Constanas 2014).

### **Social assistance and institutional support**

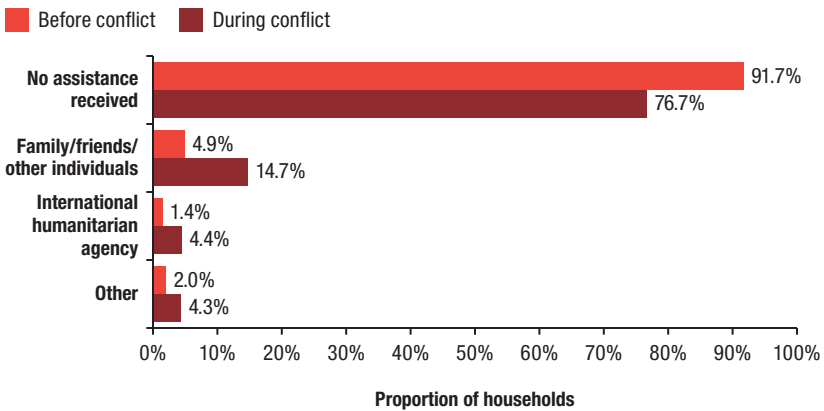
Formal assistance from institutional actors, whether national or international, was comparatively sparse. Survey data show that only 4.6 percent of urban households reported receiving support from international agencies, while less than 2 percent benefited from government aid. By contrast, 15 percent reported receiving help from family or friends, underscoring the greater relative weight of informal over formal support. Figure 11.5 presents the distribution of assistance sources for urban households.

Where formal aid was provided, delivery mechanisms leaned heavily on financial and digital channels. More than half (53.7 percent) of beneficiaries received transfers via bank accounts, while 19.1 percent received direct cash, and 24 percent were supported through in-kind or community-based distributions. Yet even these mechanisms were fragile: 53 percent of households reported disruptions in aid flows, with women, youth, and less educated individuals disproportionately affected (Figure 11.6). This aligns with broader humanitarian evidence that marginalized groups are often least able to reliably access institutional support in conflict zones (UNOCHA 2025).

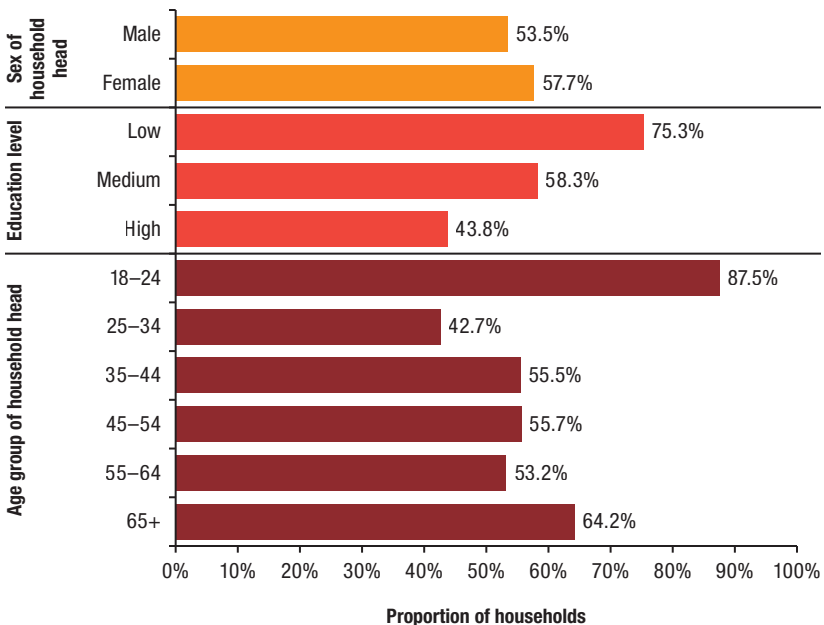
Some efforts have been made to improve the coordination and impact of assistance. Humanitarian agencies such as the World Food Programme (WFP), Food and Agriculture Organization, and United Nations Development Programme implemented integrated programs combining short-term relief with long-term livelihood recovery (WFP, FAO, and UNDP 2024). These included cash-based transfers, distribution of seed and tools, and programs for community asset creation. Local NGOs also played a significant role in providing mobile health clinics, psychosocial services, and informal education, especially in camps for internally displaced people and peri-urban settlements. However, these interventions were often hampered by insecurity, limited funding, and bureaucratic barriers.

### **Conclusion: Policy implications and recommendations**

The findings in this chapter highlight the severe and overlapping pressures faced by Sudanese households during the ongoing conflict. Coping strategies such as food rationing, asset sales, migration, and reliance on social networks have enabled many to survive, but often at the cost of long-term well-being.

**FIGURE 11.5** Assistance received by source, urban households

Source: IFPRI and UNDP (2024); authors' calculations.

**FIGURE 11.6** Disruptions in assistance by age, education, and household headship

Source: IFPRI and UNDP (2024); authors' calculations.

Persistent conflict, combined with weak institutional support, risks entrenching households in cycles of chronic vulnerability.

Recent IPC (2024/25) estimates indicate that more than 21 million people face acute food insecurity, with the highest concentrations in Darfur, Kordofan, and urban displacement sites (IPC 2024, 2025). As markets fragment and trade routes are disrupted, households are forced to shift from “stress” strategies (borrowing food, reducing meals) toward “crisis” and “emergency” strategies (selling productive assets, distress migration). The policy challenge, therefore, is not only to close immediate consumption gaps but also to halt this downward spiral before resilience is irreparably eroded.

Sudanese households have demonstrated remarkable resilience in the face of crisis. Yet resilience alone cannot secure recovery. Without strengthened institutions, inclusive social protection, and sustained investments in both livelihoods and human capital, the risks of protracted vulnerability and stalled recovery remain high. Coordinated, evidence-based policy responses are therefore urgently needed to transform resilience from survival into a pathway toward sustainable and inclusive development.

The first priority must be to stabilize market access and household purchasing power. Evidence from the WFP Sudan Market Monitor (WFP 2025) shows sorghum and millet prices at record highs, while rapid currency depreciation continues to erode household incomes. Cash-based safety nets can be effective, but they must be inflation-indexed and regularly adjusted to maintain real value. Where mobile networks are functioning, digital transfers can enhance dignity and choice; where access is disrupted, food distributions remain essential. At the same time, protecting trade corridors through humanitarian access agreements and risk-sharing measures is critical to sustaining flows of food and fuel.

Second, livelihood recovery interventions must be strengthened. Farmers and pastoralists in relatively stable areas require timely access to seeds, tools, and veterinary support, aligned with seasonal calendars, to prevent further losses in production capacity. In parallel, human capital investments—including mobile health clinics, school feeding programs, and protections for displaced populations—are needed to mitigate the long-term developmental costs of conflict.

Third, social protection systems must be both inclusive and context-sensitive. Mobile, cash-based safety nets have strong potential, but our analysis shows that not all vulnerable households—particularly rural, female-headed, and displaced households—have reliable access to mobile phones or functioning networks. This underscores the need for a layered approach that combines

digital transfers where feasible with alternative modalities such as direct cash, vouchers, or in-kind distributions. Support for community-based initiatives, especially those led by women and youth, can strengthen local resilience by complementing formal assistance.

Fourth, agricultural recovery and climate adaptation must be prioritized. Expanding access to inputs, extension services, and climate-smart practices (such as drought-tolerant seeds, water harvesting) can protect production systems from collapse. In addition, safe and legal migration pathways should be supported to preserve remittance flows, which have already become an important coping mechanism for urban households.

Finally, all interventions must be embedded within integrated, multi-sectoral planning that links emergency relief with long-term recovery and development. As the UN's Humanitarian Needs and Response Plan (UNOCHA 2025) emphasizes, no policy can succeed without overcoming severe access constraints. This requires coordinated humanitarian negotiations, support for local civil society organizations, and stronger partnerships with diaspora networks that are already sustaining communities through remittances and savings groups.

## References

- Barrett, C.B., and M.A. Conostas. 2014. "Toward a Theory of Resilience for International Development Applications." *Proceedings of the National Academy of Sciences* 111 (40):14625–14630. <https://doi.org/10.1073/pnas.1320880111>
- Brück, T., M. d'Errico, and R. Pietrelli. 2019. "The Effects of Violent Conflict on Household Resilience and Food Security: Evidence from the 2014 Gaza Conflict." *World Development* 119:203–223. <https://doi.org/10.1016/j.worlddev.2018.05.008>
- Carter, M.R., and C.B. Barrett. 2006. "The Economics of Poverty Traps and Persistent Poverty: An Asset-Based Approach." *The Journal of Development Studies* 42 (2):178–199. <https://doi.org/10.1080/00220380500405261>
- Chambers, R. 1989. "Editorial Introduction: Vulnerability, Coping and Policy." *IDS Bulletin* 20 (2):1–7. <https://doi.org/10.1111/j.1759-5436.1989.mp20002001.x>
- Cutter, S.L., B.J. Boruff, and W.L. Shirley. 2003. "Social Vulnerability to Environmental Hazards." *Social Science Quarterly* 84 (2):242–261. <https://doi.org/10.1111/1540-6237.8402002>
- de Waal, A. 1989. *The Real Politics of the Horn of Africa: Money, War and the Business of Power*. Polity Press.

- Dercon, S. 2004. "Growth and Shocks: Evidence from Rural Ethiopia." *Journal of Development Economics* 74 (2):309–329. <https://doi.org/10.1016/j.jdeveco.2004.01.001>
- DFID (Department for International Development, United Kingdom). 1999. *Sustainable Livelihoods Guidance Sheets*. DFID. <https://www.livelihoodscentre.org/-/sustainable-livelihoods-guidance-sheets>
- Folke, C. 2006. "Resilience: The Emergence of a Perspective for Social–Ecological Systems Analyses." *Global Environmental Change* 16 (3):253–267. <https://doi.org/10.1016/j.gloenvcha.2006.04.002>
- IDS (Innovative Development Strategies). 2015. *Livelihoods in Crisis: Insights from the Literature on Conflict and Resilience*. IDS.
- IFPRI and UNDP (United Nations Development Programme). 2023. *Sudan Rural Household Survey 2023*. IFPRI and UNDP.
- IFPRI and UNDP. 2024. *Sudan Rural Household Survey 2024*. IFPRI and UNDP.
- IPC (Integrated Food Security Phase Classification). 2024. *Sudan: Acute Food Insecurity Analysis, October 2024 – February 2025*. IPC.
- IPC. 2025. *Sudan: Acute Food Insecurity Situation September 2025 – May 2026*. Integrated Food Security Phase Classification. <https://reliefweb.int/report/sudan/sudan-ipc-acute-food-insecurity-analysis-september-2025-may-2026-issued-november-2025>
- Justino, P. 2012. "War and Poverty." In *The Oxford Handbook of the Economics of Peace and Conflict*, eds. M.R. Garfinkel and S. Skaperdas, 676–705. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195392777.013.0027>
- Maxwell, D., J. Coates, and B. Vaitla. 2013. *How Do Different Indicators of Household Food Security Compare? Empirical Evidence from Tigray*. FIC (Feinstein International Center). <https://fic.tufts.edu/publication-item/how-do-different-indicators-of-household-food-security-compare/>
- UNOCHA (United Nations Office for the Coordination of Humanitarian Affairs). 2025. *Sudan Humanitarian Needs and Response Plan 2025*. UNOCHA. <https://humanitarianaction.info/plan/1220#page-title>
- Walker, B., C.S. Holling, S. Carpenter, and A. Kinzig. 2004. "Resilience, Adaptability and Transformability in Social–Ecological Systems." *Ecology and Society* 9 (2):5. <https://doi.org/10.5751/ES-00650-090205>
- WFP (World Food Programme). 2025. *Sudan Market Monitor – August 2025*. WFP. <https://reliefweb.int/report/sudan/wfp-sudan-market-monitor-august-2025>
- WFP, FAO (Food and Agriculture Organization of the United Nations), and UNDP. 2024. *Sudan Emergency Response and Resilience Frameworks*. UN.