

# Rapid assessment of the hunger–climate–conflict nexus

Food and nutrition security in South Sudan

**Leigh Mayhew, Teddy Atim and Sarah Optiz-Stapleton**

## Key messages

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Fragility and conflict create vulnerabilities to climate and non-climate shocks, and impact livelihoods and food and nutrition security. Decades of fragility and conflict have led to low investment in socioeconomic development.

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In South Sudan, severe flooding has destroyed crops and killed livestock, devastating agricultural and agropastoral livelihoods. While cases of diagnosed malnutrition are low, households have little to eat beyond water lily or wild vegetables, and are eating two or fewer meals daily.

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Due to lack of income, few can afford to pay canoe ferry costs to pick up food or cash aid. A lack of bank accounts also inhibits receipt of remittances or cash aid via mobile phone banking.

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Women face the highest livelihood, food and nutrition insecurity, as well as gender-based violence.

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# Acknowledgments

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The authors would like to thank Emma Beelen, Kira Fisher, Lisa Jörke and colleagues at Action Against Hunger for their insights and inputs and their logistical support for the research. We'd specifically like to thank staff at Action Against Hunger Offices in Mali, Somalia and South Sudan for their insights and inputs during research design and review, as well as their support and facilitation of the primary data collection. We'd like to thank Alpha Youssouf Wangara for his support in coordinating and carrying out primary data collection in Mali. At ODI, we are grateful to Simon Levine for his vital inputs during peer review. We are also grateful to Jennypher Calderon for project management support. Editing and typesetting by vtype.co.uk

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How to cite: Mayhew, L. et al. (2023) Rapid assessments of the hunger–climate–conflict nexus: Food and nutrition security in South Sudan. Policy brief. London: ODI (<https://odi.org/en/publications/rapid-assessments-of-the-hunger-climate-conflict-nexus>)

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# Introduction: fragility, conflict and vulnerability to climate shocks

There is nothing ‘natural’ about disasters. When a climate hazard, such as a drought or a flood, triggers impacts that are disastrous to people, their livelihoods, and their food and nutrition security, it is because the systems upon which people depend are fragile. Elements of fragility – such as socio-political marginalisation, lack of economic development or land tenure insecurity – can create the systemic conditions that contribute to conflicts at local to national levels. And conflict, particularly violent conflict, further erodes people’s livelihoods and food security, destabilises markets and increases vulnerability to climate shocks (even if these hazards are not yet influenced by climate change). Even when conflicts are not currently occurring, the impacts of their legacy on socioeconomic development can continue to perpetuate fragility. Fragility, with or without conflicts, creates vulnerabilities and exposures to climate shocks and non-climate stressors at individual, household and community levels, such that when a hazard like drought occurs, its impacts can become disasters.

## Climate shocks layered on fragility and conflict in South Sudan

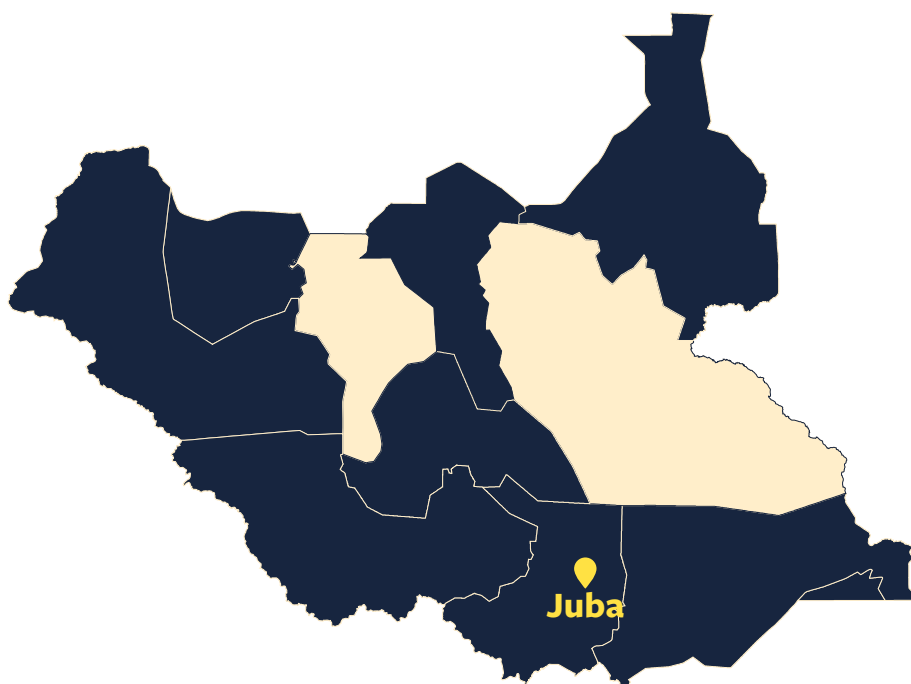
Violent conflict in South Sudan spans the national down to the local level, each with their own conflict dynamics and sets of conflict actors (WFP, 2021). A civil war broke out in 2013, following independence in 2011, between national government and opposition forces. Both sides pulled in members from the largest ethnic groups, and the civil war was fought along ethnic lines (ICG, 2022). Though a peace agreement was signed in 2018, which reduced levels of violent conflict in comparison to that experienced during the civil war, it failed to resolve disagreements around sharing oil revenues and ethno-political divisions (ibid.). There is also ongoing local-level violence, partially driven by manipulation of grievances and ethnic group marginalisation by Juba-based elites and linked with the national conflict (Krause, 2019; Wild et al., 2018). However, the drivers of local-level violence also include separate dynamics which pre-date the civil war and independence. Community-embedded militias have shown that they are willing to ignore orders from political elites in Juba, when such orders do not align with their own agendas (Krause, 2019).

Fragility and conflicts in South Sudan drive vulnerability to climate hazards. While climate hazards, particularly flooding and occasionally drought, contribute to food and nutrition insecurity in South Sudan by destroying crops and inundating fields, fragility and conflict undermine communities’ abilities to respond to or recover from such shocks (REACH, 2018). Conflict disrupts the functioning of markets, freedom of movement and access to support networks (ibid.).

Cattle raiding, a form of local-level conflict that pre-dates independence, has become more violent and further erodes household assets (REACH, 2018; Wild et al., 2018). Conflict also leads to reduced livelihood productivity and activity, either as (primarily) young men leave their jobs to join armed groups to fight or households are displaced (REACH, 2018).

Fragility and conflict not only erode communities' coping capacities to manage current climate shocks, but also prevent them from adapting to climate change. Rainfall is unevenly distributed in South Sudan (Lukwasa et al., 2022). Drought years, such as the 2015–2016 drought, have contributed to significant food insecurity, to the point of famine in 2017 (ReliefWeb, 2023). South Sudan experienced La Niña conditions – linked to extreme rainfall and flooding – from mid-2020 through to March 2023, which resulted in flooding in many parts of the country (NOAA, 2023; Lukwasa et al., 2022). Climate change projections indicate that temperatures will continue to increase, and that precipitation will continue to be highly variable, with longer periods of drought punctuated by heavy rainfall and floods (Haile et al., 2020; Trisos et al., 2022).

**Figure 1** Rumameth and Mankuac, Gogrial West County, Warrap state; Thokchak, Fangak county, Jonglei state



Note: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the authors, Action Against Hunger, ODI or the GFFO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Source: United Nations Maps & Geospatial services

**Figure 2** Fragile systems create vulnerabilities for people and communities, such that when shocks and stresses occur, they can have disastrous impacts on livelihoods, access to food and nutrition.



Source: The authors.

### Box 1: Study focus

Action Against Hunger is implementing a regional project funded by the German Federal Foreign Office (GFFO): *Multisectoral humanitarian response to the deteriorating nutrition situation focusing on severely affected crisis contexts in sub-Saharan Africa*. The project aims to improve the nutritional status of crisis-affected populations in seven countries, including South Sudan, Mali and Somalia. It also aims to generate evidence to better shape and scale up approaches that aim to tackle the impacts of layered crises, including those influenced by climate change and the cascading socioeconomic consequences of COVID-19.

As part of this regional project, Action Against Hunger has commissioned two assessments to inform and bolster its humanitarian and resilience programming and interventions. The first assessment aimed to understand, from the perspectives of those experiencing fragility, conflict and climate shock layering, how these complex crises are impacting food security and what coping mechanisms households and communities are employing. This brief presents a snapshot of the findings of the main report ‘Rapid assessments of the hunger-climate-conflict nexus: first assessment’ (Opitz-Stapleton et al., 2023).

Through 45 interviews and 18 focus groups, we examined the layered impacts of fragility, conflict and climate shocks and stresses on food and nutrition security in three communities: Rumameth and Mankuac (Warrap) Warrap State and Thokchak (Jonglei State). We also asked how people were coping with impacts and what assistance they would like. The perspectives of women and men were sought (separately), as well as those from people living with disability or illness, or caring for a disabled or ill person.

## Layered crises and impacts on livelihoods and food security

The primary concern in all three interview sites was the impact of recent flooding on crops and food security, though some interviewees in Warrap were concerned with the current (early 2023) dry season. Historical and ongoing forms of conflict have created and exacerbated vulnerabilities to flooding and other climate hazards. Some interviewees spoke of the risk of being caught up in communal violence. Others mentioned that the threat of cattle raiding is ongoing. Some households revealed that past conflict contributed to their current vulnerability (REACH, 2018).

Communities are unable to practise their dominant livelihood activities, farming or agropastoralism, due to flooding. Flood waters across the three sites have destroyed crops and

pasture for livestock, and led to livestock deaths. Both crops and livestock not only provide for household consumption, but are also saleable assets, and used to purchase food and pay for other important needs like medical care or funerals.. Cattle raiding continues, and further erodes livestock assets.

Household diets have deteriorated as a result of livelihood insecurity. As interviewees stated, a farming or agropastoral livelihood is normally expected to provide for the year ahead, with any surplus being sold. The diversity in people's diets has clearly deteriorated, from one which was supplemented by crops, livestock and livestock products, to now primarily relying on the collection of water lilies (Jonglei) and wild fruits and vegetables (Warrap). Interviewees were often frank in their assessment of these changes, stating that they simply eat to 'fill their stomachs' and noting that their diets now contain little nutritional value. There are disparities between Jonglei and Warrap in terms of access to food aid. While in Thokchak 15 households reported receiving food aid, in Mankuac and Rumameth no households were currently receiving food aid. Across all three sites, only those with extra income (selling cattle, wages, remittances) can supplement their diets.

Addressing livelihood, food and nutrition insecurity by diversifying livelihoods is hindered by several factors. Given the changes in diets and the reduction in the number of daily meals, it is likely that cases of malnutrition are being underdiagnosed. Although some interviewees did answer 'yes' to the question of whether any children or adults had been diagnosed with malnutrition, this was not consistent. Our research team noted that during focus group discussions it was difficult to get clear replies to this question, due to participants' lack of energy. In Warrap, the research team would share their own drinks and food with participants before they were able to take part in discussions.

## Transitioning to more resilient food security: key learning points

**Key learning point 1: Livelihood insecurity, as an outcome of fragility, conflict and losses due to climate and non-climate shocks, is resulting in households having to spend more in purchasing food, despite lacking the financial means to do so**

Those who have money are able to supplement their daily meals by purchasing food. However, each of these income sources is precarious – non-farm wages are not regular; the selling of cattle reduces a household's resource base; and remittances can be difficult to receive due to the low penetration of mobile banking services and the expense of canoe travel to large towns where cash can be received. The availability of remittances was rare across the three interview sites in South Sudan. However, interviewees in Thokchak revealed that these provide a valuable, if



occasional, lifeline. Those who did report receiving remittances spoke of the difficulties accessing such funds without a phone or bank account; people have to physically travel to collect or receive remittances.

### **Key learning point 2: The reporting of malnutrition is inconsistent across interview sites**

Across all three interview sites in Jonglei and Warrap, there was a lack of consistent reporting of those being diagnosed and treated for malnutrition. This is despite interviewees and focus groups reporting that households are reducing daily consumption and that some adults are at times forgoing meals to allow children to eat. Lactating mothers, mothers who had recently suffered miscarriages and adults impacted by long-term illnesses and disabilities will forgo food to ensure children are prioritised. Interviewees were frank in their assessment of their daily meals, noting that they carry little nutritional value. What comprises a household meal is extremely ad hoc and is based predominantly on what families can forage. Elderly people, pregnant women and those caring for young children or disabled household members are at a considerable food and nutrition security disadvantage. Interviewees in both Jonglei and Warrap also described difficulties in accessing healthcare facilities due to their remoteness.

### **Key learning point 3: Communities are having to make livelihood decisions in the absence of information that could help both their short-term and long-term decision making**

Communities are making plans to plant crops for the upcoming rainy season (~June to October), but this decision is being made without access to seasonal weather forecasts. Nor are people aware of climate shifts due to climate change. Education was seen as key to managing future livelihood risks in the face of climate hazards. Young men described how training in alternative trades such as bricklaying could provide an additional source of income during the dry season. However, the ability to gain an education is hindered by a household's lack of money for school fees, and challenges in commuting to school – should a school exist. Young women described having to drop out of school to help their mothers collect food for the family. They also described being seen as a 'resource' by their families due to the dowry their families would receive upon marriage. Thus, early marriage is viewed as a household coping mechanism in the face of economic challenges.

Statements from interviewees revealed a lack of weather-based/early warning systems that might inform decision-making around planting and cultivation. While some reported hearing news on the radio, others highlighted the lack of information for the forthcoming rainy season. They are still planning to plant early in the hope that they are able to harvest before the flood waters return, but they are doing so without information either on forthcoming weather or on longer-

term trends. Some suggested the floods were a punishment from God, including punishment for communal conflicts – which implies that some do not view environmental changes as part of a long-term trend to which they will need to adapt.

#### **Key learning point 4: Gendered vulnerabilities create gendered differences in livelihood, food and nutrition security**

Female interviewees reported taking on the majority of household tasks, including looking after the children and caring for disabled or elderly relatives, while at the same time ensuring that the household has enough to eat. This means that women have limited time to search for food, restricting the distances they are able to travel. Cultural practices and structural conditions are contributing to the vulnerability of women. Under pressure from families, young women report leaving education to enter marriage early in order to obtain a dowry. However, marriage does not always provide security for women. Female interviewees reported the practice of men having multiple wives, and subsequently feeling abandoned as their husbands focus on their new families. Under inheritance marriage law, women transfer assets (cattle) to their new husband. Widows also reported being excluded from community-based decision-making, including on issues to do with flood defences and farming.

Cases of domestic violence were reported and linked to tensions over the current crisis. Some men accuse their wives of not providing. Some female interviewees reported that men will often take what available money there is by force; in some cases, women are said to hide their additional incomes from their husbands. Families also reported not allowing their daughters to travel alone to collect food due to fears of being raped. Those who are victims of rape face social stigmatisation. Widows and female-headed households reported that they also risk being attacked and having their food aid stolen when they go to collect it.

#### **Key learning point 5: Livelihood diversification is a resilience strategy, but not possible for many**

Decades of fragility and conflict have led to underdevelopment in infrastructure, education and non-farm economic activities. This has subsequently impacted livelihood options and capacities to diversify. Interviewees expressed a desire for both equipment and training to support their primary livelihood activities in agriculture. Beyond this, education – or lack of – was highlighted as a major factor in preventing individuals from accessing alternative livelihoods. During focus group discussions, young men and women recognised the importance of education in providing the community with alternatives. For example, young men noted that training in alternative trades, such as bricklaying, may offer them alternative sources of income during the dry season. However, both young men and women reported having to drop out of school. Young women had to leave due to having to help their mothers collect food for the household, or being under pressure to enter marriage. Young men had left education to find paid work, with some migrating to Sudan.

In addition to little education, lack of infrastructure and access to equipment is hindering livelihood options. In Thokchak, being able to look for jobs in other villages was said to be restricted to those who have access to a canoe. Flood waters could allow men to fish, but this is dependent on the individual having access to fishing equipment. Some of those who are able to catch enough said that this provides both food and (in some cases) a surplus which they can sell. However, the lack of road infrastructure in Warrap was a common concern, making it difficult for sellers to travel to markets, as well as causing problems for buyers to come to a seller's location – a double barrier to the buying/selling of goods. During focus group discussions, elderly groups were also noted to be at a disadvantage as they struggle to travel long distances to sell firewood.

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