



Report

Rapid assessments of the hunger–climate–conflict nexus

First assessment: lived experiences relating to
food and nutrition security in Mali, South Sudan
and Somalia

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Acronyms/Glossary

| | |
|----------------|--|
| AMO | Atlantic Multidecadal Oscillation |
| AQIM | Al-Qaeda Organization in the Islamic Maghre |
| CCA | climate change adaptation |
| CMA | Coordination des mouvements de l'Azawad |
| DRM | disaster risk management |
| DRR | disaster risk reduction |
| ENSO | El Niño Southern Oscillation |
| FG[D] | focus group [discussion] |
| FGS | Federal Government of Somalia |
| FMS | Federal Member States (of Somalia) |
| GFFO | German Federal Foreign Office |
| IDP | internally displaced person[s] |
| IOD | Indian Ocean Dipole |
| ITCZ | Intertropical Convergence Zone |
| JNIM | Jama'at Nusrat ul-Islam wal-Muslimeen |
| KII | key informant interview |
| MINUSMA | United Nations Multidimensional Integrated Stabilization Mission in Mali |
| MNLA | Mouvement national de libération de l'Azawad |
| RUTF | Ready-to-use therapeutic food |
| SAADO | Smile Again Africa Development Organization |
| SSP | South Sudanese Pound |
| WAM | West African Monsoon |
| WASH | Water, sanitation and hygiene services |
| WFP | World Food Programme |

Executive Summary

This is the first of two rapid assessment reports in support of Action Against Hunger's Multisectoral humanitarian response to the deteriorating nutrition situation focusing on severely affected crisis contexts in sub-Saharan Africa. With reference to crisis-affected populations in seven countries (South Sudan, Mali, Somalia, Ethiopia, Uganda, Niger and Sudan), this project aims to: improve nutritional status; increase access to water, sanitation and hygiene services (WASH) and improve WASH practices; increase access to and use of essential health services at primary healthcare centres; and increase the use of malnutrition prevention and treatment services in women of reproductive age and young children. It also aims to generate evidence to better shape and scale up humanitarian approaches tackling the impacts of layered crises, while making concrete recommendations, based on community preferences and capacities, of what types of interventions are needed to reduce the loss of livelihoods, and thereby food and nutrition insecurity, in the face of conflict and climate shocks.

It is difficult to detect climate change signals in some of the extreme environmental events, namely floods and droughts, that have recently (within the last 10 years) or are currently (within the last year) impacting Mali, South Sudan and Somalia. Some of the extremes are within the range of natural variability, such as the Horn of Africa droughts of 2016–2017 (van Oldenborgh et al., 2017). Others, however, do have a clear climate change signal – such as the West Africa large-scale flooding from May to October that impacted Mali, in which the West African Monsoon arrived early and much rain fell in short, heavy events (Zachariah et al., 2023).

Whether a climate change signal is detectable or not, what matters is untangling why various climate hazards are leading to such disastrous impacts on livelihoods, food and nutrition security – and that there are gender, age and ability differences in impacts. In the disaster risk management (DRM) and climate change adaptation (CCA) communities, it has long been understood that disastrous impacts (what has actually happened) and climate risks (what might happen), are socially created. A focus on the hazard (and whether it was influenced by climate change or not) misses entry points at which various fragility drivers and socially-created vulnerability can be reduced, particularly with regard to food and nutrition security, and people's resilience can be enhanced.

Fragility describes the state of the systems upon which people depend for their livelihoods and well-being. Drivers of fragility – such as sociopolitical marginalisation, lack of economic development or access to financial capitals, insecure land tenure, and corruption – can create the systemic conditions that contribute to conflicts at local to national levels. And conflict, particularly violent conflict, further erodes people's assets and livelihoods, destabilises markets and can massively increase vulnerability. Fragility, particularly when various forms of conflict are layered on top, creates vulnerabilities and exposures to climate shocks and non-climate stressors at individual, household and community levels, to the extent that when a hazard such as drought occurs, its impacts can become disasters.

The evidence within this assessment report has been generated via interviews and focus group discussions across interview sites in South Sudan,

Somalia and Mali. The interviews and discussions were designed in order to provide entry points for Action Against Hunger's programming, by seeking to discover communities' primary concerns – what non-climate stressors, and leading to loss of livelihoods and food and nutrition insecurity? And what measures are communities able – or unable – to take in addressing these?

1 Introduction: project aims

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

As part of this regional project, Action Against Hunger has commissioned two rapid assessments to inform and bolster its humanitarian programming and interventions. The assessments focus on South Sudan, Somalia and Mali. Current interventions of Action Against Hunger programming range from meeting acute needs (e.g. nutrition and health services, food and cash transfers, water and sanitation) to those that can contribute to enhancing resilience (see Box 1 for a discussion on resilience); for example, training around early warning, help with agricultural inputs, or flood control measures. The assessments strengthen the evidence base around how people are experiencing the impacts of layered challenges, and what assistance they would like to build better lives for their families – and they uncover entry points where Action Against Hunger interventions and programmes might be better targeted or modified to meet humanitarian needs and support resilience. The results will also be used to inform the project’s global, regional and national advocacy activities to better mobilise support for

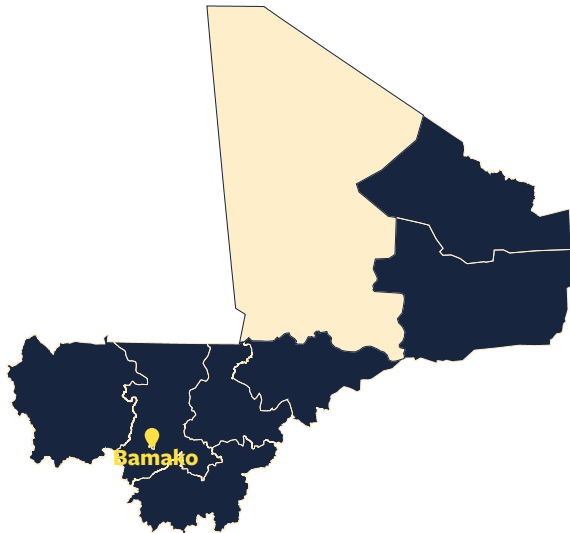
climate change adaptation, disaster risk reduction (DRR) and anticipatory humanitarian action in these areas.

Each of the two rapid assessments is thematic. Theme 1 examines the ways in which people’s nutritional status and livelihoods are being impacted by fragility, conflict and climate shocks; household and community coping mechanisms; how existing interventions are reducing hunger and acute malnutrition and what gaps remain. Theme 2 undertakes a review of existing interventions by Action Against Hunger and other humanitarian, development, peacebuilding and climate change adaptation actors in the context of the first assessment, in order to explore how such interventions are anticipating and mitigating the layered impacts of conflicts, climate and non-climate stressors.¹ Both assessments interrogate how well existing policies and programmes (local to national, NGO and donor-led) are strengthening community food security resilience, and seek to identify gaps or unintended consequences that could increase various climate or conflict risks and which should therefore be modified to avoid maladaptation over the short and long term.

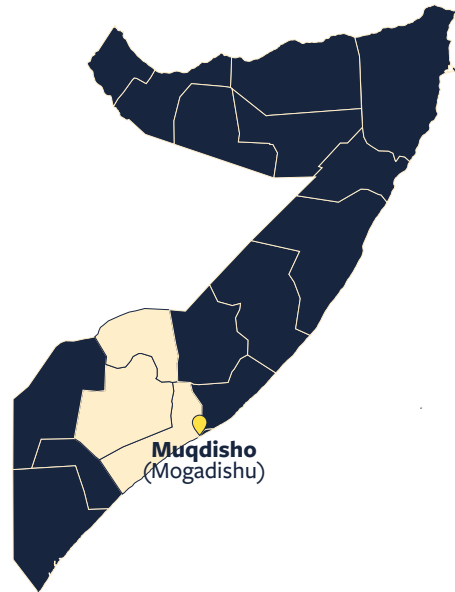
¹ Non-climate stressors are those which are unrelated to changes in climate, such as inflation and commodity shortages as cascading consequences of the COVID-19 pandemic.

Figure 1 Location of the interviews and focus groups in the three case study countries.

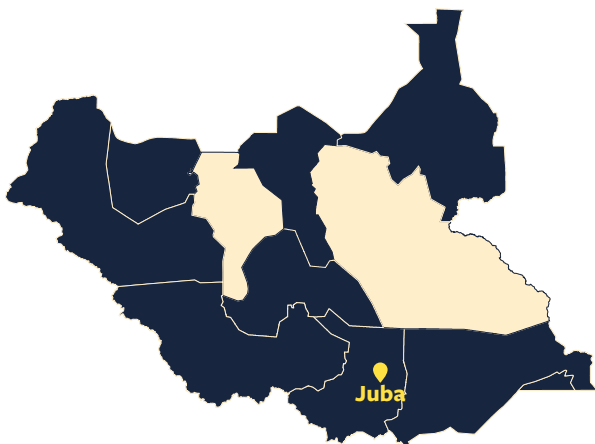
Mali Arnassaye, Commune of Ber, Tombouctou region; Hondo Bon Ababer, Commune of Bourem Inaly, Tombouctou region; Tintelout, commune of Alafia, Tombouctou region.



Somalia Elbarde, Bakool region; Baidoa, Bay region; Barawe, Lower Shabelle region.



South Sudan 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

Box 1 Defining resilience

There are multiple definitions of ‘resilience’, depending on the community of practice. In this report, we take resilience to encompass ‘the ability to anticipate, avoid, plan for, cope with, recover from and adapt to (climate-related) shocks and stresses’ (DFID, 2014). A critical component of resilience is adaptive capacity – ‘the ability of social systems to adapt to multiple, long-term and future climate change risks, and also to learn and adjust after a disaster’ – and is interlinked with absorptive and anticipatory capacities (Bahadur et al., 2019). Enhancing all three is necessary for reducing vulnerability and requires not only reducing immediate suffering – food insecurity, malnutrition and lack of water and sanitation – but taking a longer-term view to reducing vulnerabilities and enhancing capacities to better manage future shocks. Such a long-term view actually requires tackling inequalities in socioeconomic development, working with peacebuilding efforts and integrating environmental protection, conflict sensitivity, disaster risk management and climate change adaptation within programming and interventions. Without considering these elements, interventions are not actually contributing to resilience; indeed, they run the risk of perpetuating the vulnerabilities that lead to recurrent and protracted crises.

However, there are debates within the humanitarian community as to how humanitarian interventions can contribute to resilience without detracting from their mandate of saving lives and meeting immediate needs. In the second assessment, we will interview Action Against Hunger and other key stakeholders with whom they work to understand their framings of resilience and how these shape interventions.

This report covers the findings of interviews and focus group discussions at three sites each in Somalia, South Sudan and Mali, in accordance with Theme 1 (see Figure 1). The sites are: Thokchak, Mankuac and Rumameth (South Sudan); Baidoa, Barawe and Elbarde (Somalia); and Arnassaye, Hondo Bon Ababer and Tintelout (Mali). The Theme 1 rapid assessment captures narratives and perspectives on the challenges people are facing in their lives and livelihoods, what is most important to them, how they are coping with challenges and where they are seeking to adapt or change (Box 2).

It situates their lived experiences within broader conflict dynamics, market fluctuations and climate trends for each country. Historical and ongoing conflicts have impacted the socioeconomic development and livelihood choices for people in all three countries. Various humanitarian and DRM actors have programmes and interventions at each site; this report seeks to understand the impact of these on recipients and non-recipients in terms of supporting food and nutrition security and livelihoods in the face of complex protracted and forgotten crises.

Box 2 Lived experiences and needs

Theme 1 has the objective of elevating the voices of vulnerable internally displaced people (IDP) and host communities, disaggregated by gender, age and ability. Through semi-structured interviews and focus group discussions with both aid recipients and those not receiving aid, we asked about:

1. the current state of food security as compared with the last year, and whether particular household members were currently eating less than others. The impacts (on food security) of the costs of purchasing food and/or farm and livestock inputs, household debt and borrowing were also investigated
2. types of disputes and violent conflict (including historical) and their impacts on food and nutrition security, livelihoods, and displacement. We sought to understand what types of conflict were disrupting lives, food security and nutrition the most, and what the gendered impacts were. We also asked about coping and conflict mediation mechanisms
3. types of climate shocks and other non-climate or conflict stressors impacting lives, livelihoods and food security. We asked what climate shocks and other stressors most impact livelihoods and food security, how people were coping, and about their sources of information about these shocks
4. access to internal (community support structures, remittances) and external (humanitarian, DRM or other) assistance and how people were reporting their food and nutrition security in relation to access and type of assistance.

At each site, between 15 and 18 interviews and 4–6 focus groups were conducted. To capture different perspectives, the focus groups were separated by gender, age, and those living with or caring for someone with a disability or illness. The interview guides and focus group discussion tools can be found in the Annex.

2 Fragility, conflict and climate: combined impacts on food and nutrition security

2.1 Fragility and conflict create climate vulnerabilities: impact layering

Popular media and some policy narratives seek to link climate shocks (and change) with conflict, often portraying climate shocks as direct drivers or threat multipliers of conflict. However, evidence suggesting that various climate shocks (floods, droughts, heat waves, etc.) actually do contribute to conflicts, particularly violent and armed conflicts, is limited and often weak (Brooks et al., 2022; Raineri, 2020; IPCC, 2022). Studies highlight complex, contradictory and context-specific relationships, without often acknowledging that the root causes of fragility and conflicts are political, social and economic, built on histories of marginalisation, inequality and exclusion (ibid.). They ignore the agency of various influential actors in public discourse and mobilisation to violence (such as armed groups or political elites), or of community groups in mediating and calming disputes to reduce the risk of violence. Ultimately, such framings ignore the fact that risk,² both of climate-triggered disasters and conflict, results as much, and sometimes more, from the interactions of fragile systems with vulnerable

people, livelihoods and local economies than from the hazards (floods, drought, etc.) themselves – and that these risks and disasters are socially constructed (UNDRR, 2015).³

Fragile contexts can be broadly seen as those places that have been left behind, to use the vocabulary of the 2030 Agenda for Sustainable Development (OECD, 2018: 25). Fragility describes the state of the systems – governance, education, healthcare, etc. – upon which people depend for their livelihoods and well-being. Aspects of fragility include weak governance and corruption, socio-political marginalisation and inequality, and land and natural resource tenure insecurity (OECD, 2016; Brooks et al., 2022). Fragility at the system level creates vulnerabilities and exposures to climate shocks and non-climate stressors at individual, household and community levels, to the extent that when a hazard such as drought occurs, its impacts can become disasters (see Figure 2; Wisner et al., 2003). Fragility is linked with conflict, although not all fragile states or settings have high levels of conflict (OECD, 2016). But when and where conflicts occur in fragile settings, whether civil war or government oppression or interpersonal violence, they drive people toward

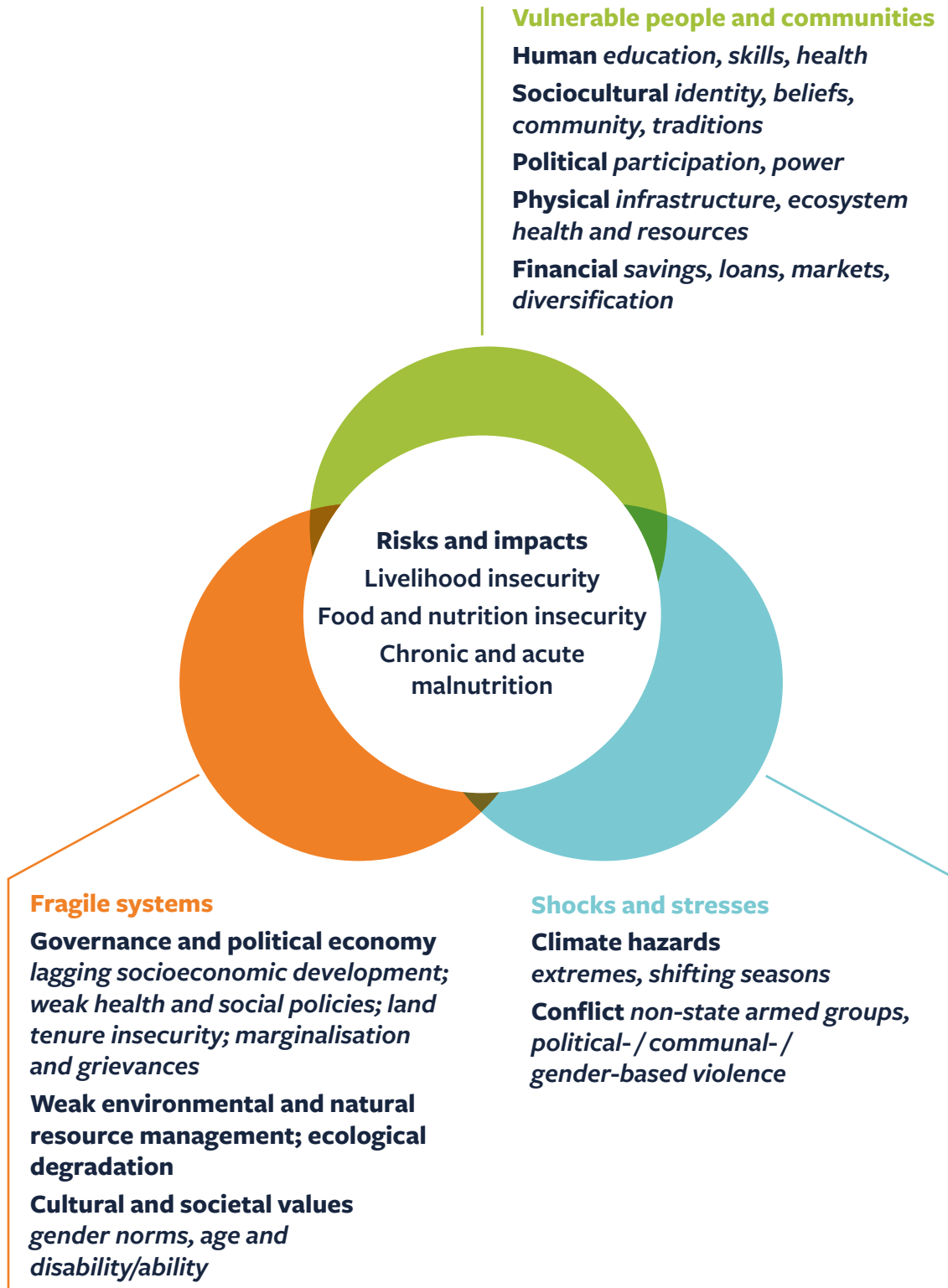
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- 2 Risk is the potential for negative impacts – loss of life or ecosystem services, injury, destroyed or damaged assets – which could occur (but which have not yet actually occurred) to a system, society or a community if one or more hazardous events (including conflict events) occur. However, the types and severity of impacts that could occur often depend more on socially constructed vulnerability (themselves often driven by fragility and historical and ongoing conflicts) and upon where livelihoods and assets are located, creating proximate exposure to hazards. As noted in the 2015 Global Assessment of Risk, ‘exposure and vulnerability, as well as hazard itself (through climate change and environmental degradation) are socially constructed through underlying risk drivers, including globalised economic development, poverty and inequality, badly planned and managed urban development, environmental degradation and climate change’ (UNDRR, 2015: 33).
- 3 Disasters are the actual, measurable negative impacts that have occurred when triggered by a hazard. Disasters are socially constructed through fragility, vulnerability and exposure.

and keep them in poverty and food insecurity; they erode people's assets, social networks, local formal and informal economies and livelihoods; they kill and maim with knock-on impacts on health and incomes; and they cause displacement (Collinson, 2003; Nigel, 2009; Wiggins et al., 2021).

The three case study countries are marked by high degrees of fragility and levels of conflict, which have in turn created high individual, household and community-level vulnerability to climate and non-climate shocks. Climate shocks within the last decade have included floods in South Sudan and Mali, and recurrent drought in Somalia.

Food, seed and fertiliser price increases in the past few years are seriously threatening food and nutrition security; the increases are due to multiple international factors – e.g. trade impacts of COVID-19, the Russian war in Ukraine, and the banning of rice exports from India in 2022 due to deficient monsoon rains (Weingärtner et al., 2022; The Economist, 2023) – interacting with local factors, such as difficulties in transporting goods due to conflict. The interlinked impacts of fragility, conflict, climate shocks and inflation on food and nutrition security are explored further in each of the study contexts.

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.



2.2 South Sudan

2.2.1 Context: fragility, conflict and climate shocks

Historically, conflict in South Sudan broadly fit into three main categories: wars of liberation with Sudan; ethnic feuds over resources; and rivalry between political elites (Jok, 2013). Following independence in 2011, civil war broke out in 2013 between government and opposition forces. Both drew members from the largest ethnic communities, resulting in the civil war being fought along ethnic lines (ICG, 2022). The civil war resulted in over 400,000 deaths. A peace agreement was signed in 2018, and while this has led to reduced levels of violence, it failed to resolve disagreements around the sharing of oil revenues and ethno-political divisions (ICG, 2022). The peace agreement also resulted in elevating the weakened opposition force to a similar power standing as forces in government, providing access to oil revenues and foreign investment and aid, and perpetuating a ‘political marketplace’ in which armed groups outside the two main forces sell their services to the highest bidder. (Boswell et al., 2019).

While the scale of conflict related to the civil war was severe, it is important to note that inter- and intra-communal conflict has resulted in more fatalities and is the primary driver of insecurity among South Sudanese communities (Krause, 2019). Even though drivers of communal violence at the local level sometimes pre-date that of the civil war and independence, local conflict dynamics can be connected to conflict at the national level through manipulation of grievances and the marginalisation of certain groups by Juba-based political elites with connections to particular communities or areas (Krause, 2019; Wild et al., 2018). In recent years, historic forms

of communal violence, such as cattle raiding, have become more violent due to the proliferation of arms (Wild et al., 2018).

Though there is a link between national actors and some violence at the local level, outbreaks of local violence cannot be reduced simply to the motivations of political elites based in Juba. Violent conflict is complex and occurs across the national, sub-national and local level, each with their own conflict dynamics and sets of autonomous actors (WFP, 2021). Local intermediaries (e.g. local MPs, chiefs and religious leaders) play an important role in violence and peacebuilding – both in the mobilisation of communities to fighting and in acting to restrain the use of violence (Pendle, 2021). These local intermediaries have also met resistance from local communities when it comes to mobilisation orders on behalf of political elites in Juba (Boswell et al., 2019). 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).

Reflecting on this context of both historical and ongoing violence, studies have shown that while conflict may not always be the proximate cause of vulnerability to food insecurity in South Sudan compared with natural hazard-related shocks, its role is often to disrupt the coping mechanisms which communities use to respond to such shocks. These coping mechanisms include the availability of assets; the functioning of markets; the ability to move freely; and access to support networks (REACH, 2018).

Conflict erodes household resource bases by making livelihoods difficult to pursue: young men and other working household members often stop working during mass mobilisations for armed groups; and communities have to stop agriculture

or other livelihood activities to focus on defence. (ibid.). Conflict also results in displacement, which can be both short-term and long-term. This displacement can also create new vulnerabilities through the transmission of animal and human disease and increase pressure on the local resource base (ibid.).

Understanding how conflict affects South Sudan, and how it erodes communities' ability to respond to climate shocks, is critical in the context of both current climate extremes and projected climate change. South Sudan has a hot and humid climate, except for arid grasslands in the northernmost regions of Upper Nile and Northern Bahr el Ghazal states and the far east of Eastern Equatoria state. Rainfall is unevenly distributed, with much of the country – including the study states of Warrap and Jonglei – experiencing one rainy season from approximately late March through October; June to September are the wettest months (Lukwasa et al., 2022); some high upland areas have two rainy seasons (FEWS NET, 2023). The rainy season(s) follow the north–south movement of the Intertropical Convergence Zone (ITCZ) and are strongly modulated by the El Niño Southern Oscillation (ENSO) and the Indian Ocean Dipole (IOD) mode (Lukwasa et al., 2022; Tiitmamer, 2019).

Drought years, such as the 2015–2016 drought, are correlated with El Niño (Lukwasa et al., 2022) and contributed to significant food insecurity and famine in 2017 (ReliefWeb, 2023a). Little respite was had between that strong El Niño and the flip into both a warmer IOD mode (starting in 2019) and La Niña, which began in mid-2020 and persisted through March 2023 (NWS NOAA, 2023). La Niña conditions are correlated with extreme rainfall and flooding in many parts of the country (Lukwasa et al., 2022); they have led to widespread flooding throughout the two study states. Despite the protracted flooding and

number of flood events since 2000, however, overall rainfall totals have declined 10–20% and temperatures have increased by 0.7–1.1°C since the 1970s (Funk et al., 2011). 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).

2.2.2 Conflict and climate hazard impacts on livelihoods

Common findings across the three South Sudan interview sites

Across the three interview sites, interviewees' primary concerns were related to flooding and, to a lesser extent, the current dry spell in Warrap. Interviewees' immediate concerns centre around the impacts of flooding, but conflict is still present and may have played a role in existing vulnerability. Across the three interview sites, interviewees' primary concerns were related to flooding and, to a lesser extent, the current dry spell in Warrap. Although various forms of conflict were not as prominent among concerns, it is important to add some nuance as to why this might be the case. Interviewees and focus groups were specifically queried on the situation 'in the last 12 months' and are thus likely to be reporting on immediate concerns. In not delving further back into people's past experiences, we may not have uncovered previous experiences of conflict that may have eroded household resources. Similar arguments have been made in other studies, which found that while climate hazards, such as flooding, were important proximate causes of famine, household vulnerability to natural hazards had arisen due to previous conflict (REACH, 2018).

Communities are unable to practise their dominant livelihood activities due to flooding.

The majority of those interviewed described their primary occupation as either farmer or agropastoralist. However, flood waters across the three sites have resulted in the destruction of crops, and a lack of pasture for livestock resulting in livestock deaths. Both crops and livestock not only provide for household consumption, but are also saleable assets. Communities are planning to plant crops for the next rainy season, but these decisions are being made in the absence of information about the coming rainy season or long-term climate shifts. The ability to pursue alternative livelihoods is hindered by multiple factors. The lack of road access during flooding makes it difficult to access markets to both buy and sell goods. Lack of education was also reported to be a hindering factor in trying to find other sources of work. Fishing was cited as a possible source of income and food, but equipment is expensive and markets that sell the equipment are difficult to reach.

The drivers of vulnerability are multifaceted, and do not occur in isolation.

Descriptions of ability (or lack of ability) to sell livestock in order to buy food were clear. It is apparent that multiple factors contribute to the erosion of livestock assets beyond flooding; other reasons cited included cattle raiding and the need to pay for a family member's medical treatment or funeral. These factors contribute to eroding the household resource base while, at the same time, the household is trying to survive the impacts of flooding. 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 a 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.

Site-specific perceptions on conflict and impacts on livelihoods

Thokchak (Jonglei): The majority of those interviewed gave their primary occupation as farmer or pastoralist. However, given the current flood conditions, none could be said to be practising their primary livelihood activity. Interviewees described the floods as having left them with little land to cultivate; what they are able to cultivate is not enough to sustain them. Those who own livestock stated that they had had animals drown in flood waters or die due to a lack of fodder. One interviewee stated that the situation had been getting worse since 2020, prior to which their farming activities had provided them with enough produce to live on. Six of the ten interviewees who stated their occupation as farmers described supplementing their primary livelihoods via activities such as selling firewood, charcoal and sometimes fish at markets in Paguir. Some women also provide labour as porters, carrying supplies brought in by charter at the Action Against Hunger Therapeutic Feeding Centre in Paguir. But such activities are also affected by the floods: for example, the submergence of firewood. One interviewee also stated that more people are resorting to selling firewood, leading to greater competition.

Those whose livelihoods are not dependent on agriculture are also struggling. One female interviewee who owns a teashop explained that

business was down due to a lack of customers, as people do not have the money to buy tea. At the same time, flooding is making it more difficult and expensive to get supplies. One interviewee (a water taximan) described how peoples' livelihood struggles have reduced the prices they are able to pay for transportation. Access to remittances was rare among the interviewees. Furthermore, two interviewees who had received remittances described the barriers to accessing these funds without access to a phone or bank account: for any financial transaction, they must either travel to collect the money, or rely on someone else to come and deliver the money to them in person.

As a result of flood waters in the area, access to a canoe is critical. It provides a means to look for jobs in other areas, and access to healthcare, schooling facilities, World Food Programme (WFP) food aid and markets in Paguir. As one interviewee stated, 'canoe is life'. Accessing canoes in the area is difficult; not all households own one, and paying for a canoe ride can be costly. The water taximan stated that he was charging each passenger 200 SSP (approximately \$1.55) per journey, whilst other interviewees quoted 2,000 SSP (\$15.35) and 6,000 SSP (\$46.05) for a return journey to Paguir. To put these costs in context, one woman sells firewood in Paguir for 4,000 SSP (\$30.70) and half of that goes toward paying for her return trip. Women who are single or widowed, or whose husbands are away, have difficulties accessing a canoe due to costs. The costs of securing a canoe ride also mean that a lot of children are missing out on an education as they are unable to attend school in Paguir.

During focus group discussions, female youth revealed that due to a lack of access to education in the local area and the inability to travel further afield, more young women are getting married earlier. This results in greater risks faced during

childbirth and increased infant mortality; they also face difficulties due to inexperience in looking after a household. These difficulties not only arise through marriage but also in cases where parents die and young children are expected to take on the role of carers. One interview with a teenage girl revealed that she had taken on responsibility for her younger siblings. The interviewee expressed difficulties in looking after her siblings due to her inexperience in areas such as cooking and providing for a family. While the teenage girl does live with her stepfather, she expressed concern that he would remarry and no longer care for her and her siblings. Concerns were also expressed by wives about their husbands remarrying and abandoning their families. One interviewee stated that her husband had done just that, leaving her as the sole provider for the family.

Female-headed households also stated that due to their situation, they face specific vulnerabilities. For example, some women reported that their husbands had migrated to Uganda or Sudan and, in the absence of communication, they do not know whether they are alive or dead. One widow said that since the death of her husband, she has found herself excluded from community decision-making related to flood defences and farming.

In comparison with the impact of flooding, concerns around conflict were mixed. While not all interviewees in Thokchak highlighted conflict as a concern, many did, noting that communal conflict makes them feel insecure, and that male members of the household are reluctant to travel very far or have left the home to avoid revenge attacks. Some female focus group discussions expressed similar concerns, stating that the fear of being caught up in communal violence means that they are afraid to travel any distance to look for alternative sources of work. Beyond armed conflict, women also highlighted cases of domestic gender-based

violence. Women reported that the current crisis has led to increased tensions within the household, including men using force to take money from their wives. Women reported having to hide their incomes from husbands. Single women also reported a greater risk of being attacked while going to collect food aid from Paguir. They stated that men would attack them and steal their food aid.

The interviews also illustrated the importance of thinking about violence not only as a proximate cause of vulnerability, but also as a factor in the past that can increase household vulnerability in the present. One man described how he had been initially displaced from Pham County by the outbreak of violence in 2013, which led to him losing his job as a policeman. He was then displaced again due to flooding in 2015, resulting in him living in the current area, where flooding has only left him with a small plot of land.

Mankuac (Warrap): Similar to Thokchak, the majority of those interviewed gave their primary occupation as either farmer or agropastoralist. According to one interviewee, the floods of July and August 2022 resulted in the destruction of crops. These crops are usually expected to see them through the year and any surplus sold, with the income from surplus used e.g. for reinvestment by purchasing cattle, or to pay for school fees. During focus group discussions, female youth reported that this is no longer possible and that they have had to leave education in order to support their mothers in collecting food for the family to eat.

To add to the impact of the floods, at the time of data collection interviewees described how wild fruits and vegetables – the main source of food – are withering in the current dry spell. In preparation for the rainy season,

most interviewees are making plans for cultivation. One of them stated that they plan to plant crops that flower early to avoid flooding, while another described clearing plots of land on higher ground. Although one interviewee reported hearing on the radio that the floods are likely to be bad this year, many seem to be making livelihood plans for the rainy season based on hope and options available to them, rather than weather-informed decision-making.

Those who own livestock that they can sell in order to buy food are seen as better-off. However, one example of such a household shows that assets can become depleted: the interviewee described how her husband – who had been a trader – had fallen ill and they had used the capital from his business to pay for his treatment. The husband’s extended family, who were also affected by the floods, are relying on them for sorghum. Currently the family are selling livestock to pay for her husband’s treatment and provide for the family, but the concern is that this resource will become irrevocably depleted due to the long-term illness affecting her husband.

The interviews in Mankuac also revealed how cultural traditions can contribute to gendered vulnerability. Two female interviewees described how, after the deaths of their husbands, they were ‘inherited’ by other male family members. One of these interviewees described marrying her brother-in-law and giving birth to his children. As part of the re-marriage, the brother-in-law also inherited her husband’s cattle. She stated that her husband does not provide for them and has left her with no cattle. The dowry system, whereby marriages are paid for via cattle, also appears to leave people in precarious positions. One male interviewee had three wives and, as part of these marriages, had to pay the dowry of cattle.

This only left him with three cattle which were later stolen during a cattle raid.

In terms of primary concerns, conflict did not feature as heavily as climate shocks. However, some interviewees reported incidents of cattle raiding by armed groups from other communities, which took place as recently as December 2022. Although not referring to a specific event, interviewees during a focus group discussion reported that cattle raiding had also been perpetuated by youth within the community. Others also stated that cattle raiding might be carried out within families, with poorer relatives targeting those with cattle.

There were also cases of domestic violence reported, related to tensions around lack of food within households. Female focus group discussions revealed that rape is a concern within the community. They reported not sending young women alone to go and collect wild fruits and vegetables, for fear of rape. Being raped carries social stigma for the victim and can lead to difficulties getting married.

Similar to the findings in Thokchak and in other studies (REACH, 2018), the interviews revealed the impact of previous conflict. One interviewee noted that while the area is not currently experiencing conflict, they are still dealing with the aftermath of communal violence in 2006–2008. This outbreak of violence led to them being displaced from the area and all of their cattle being raided. This has had a lasting impact on their current situation:

We lost very many people and cattle were raided during the fighting which left us poor to date. We also lost one of our family members who was not even involved in the fighting and

was killed yet he was married. We ran away and left our sorghum and moved with nothing and without any food to eat. (Interviewee from Mankuac)

Rumameth (Warrap): Like Thokchak and Mankuac, interviewees here described how flooding has led to the destruction of farmland and the loss of livestock. One interviewee expressed concern about the current dry spell as it means their remaining livestock are likely to die from lack of pasture. Interviewees stated that the floods have resulted in the destruction of their property and in a lack of materials such as grass and building poles to repair their huts. One interviewee noted that relocating away from flooded areas was not possible as they lack the resources to build huts elsewhere. One male farmer reported that he had purposely moved to the area in search of more fertile land, but later found out it was a flood plain, and his land had repeatedly flooded. Like those in Mankuac, interviewees stated that they plan to plant early to allow them to harvest before the floods return.

Interviewees spoke of participating in various income-generating activities to support their primary livelihoods of farming, including selling tobacco, cut grass and firewood. However, a lack of flood-resilient road infrastructure is making it difficult to transport goods to the market and is leading to an increase in the price of food items such as sorghum. One female farmer reported spending all available income on food, when previously it had only been half. Another female farmer who had previously sold alcohol, sugar and sweets can no longer do so due to spending all her savings on sorghum.

Some interviewees' accounts showed how multiple factors were contributing to household vulnerability through the erosion of saleable assets

such as livestock, which at times would be used to trade for sorghum. One interviewee has had to use their two remaining cattle to pay for a daughter's burial and funeral; they no longer have any cattle to sell to buy sorghum. A male farmer lost his remaining cattle to death and sales to finance his wife's dowry, leaving him with no remaining cattle to sell for purchasing food. Another male farmer described losing all his cattle through paying for a dowry, cattle raids and flooding. The issue of marriage is also driving vulnerability in female-headed households. During focus group discussions, a widow spoke of marrying her brother-in-law after her husband's death, after which her brother-in-law then went on to marry again, leaving her to look after her family by herself.

The erosion of household assets increases pressure on female youth to marry young. Female interviewees described being seen as a 'resource' by their families, whereby their marriage would secure a dowry. As a result, they are getting married earlier, abandoning education and facing greater risks during childbirth due to their age.

In line with the previous two interview sites, dealing with the impact of flooding emerged as interviewees' primary concern. Most reported that there is either no conflict in the area or that people are too hungry and too busy surviving to fight. However, during one focus group discussion with male youth, interviewees referred to armed groups that 'live in the bush' and raid their cattle. This was not repeated across other categories of focus group discussion.

However, as in the contexts of Thokchak and Mankuac, it is important to consider past incidents of conflict, as interviewees may not be focused on these during current crises. During one focus group discussion, one woman stated that

her family had been displaced by conflict from Aneet in April 2022. This led to separation from her husband, who ended up in a different area (although it is not clear why). The woman moved to her husband's family home, but she has since been further displaced by floods and her husband has now died.

2.2.3 Cascading impacts on food and nutrition security

Common findings from across the three sites

Household diets have deteriorated as a result of livelihood insecurity. As interviewees stated, these livelihoods are normally expected to provide food for the year ahead, with any surplus being sold. The diversity in people's diets has clearly deteriorated: going from a diet which included 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. Whilst 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.

Cases of malnutrition are likely to be 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. Given the changes in diets and the reduction in the number of daily meals, it is likely that cases of malnutrition are being underdiagnosed. Our research team

noted that during focus group discussions it was difficult to get clear replies to this question, due to participants having a 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.

Site-specific perceptions on food and nutrition security

Thokchak (Jonglei): The amount households were consuming fluctuates depending on the amount of food that is available that day. Most interviewees described eating one or two meals a day, although there were some days when the households would go without eating at all. One interviewee noted that while before the floods they used to eat three meals a day, this has now dropped to one meal. When food is scarce, all households reported prioritising children over older members.

Households are primarily eating water lilies, occasionally supplemented with other sources of food such as sorghum and fish. What people have available to eat is ad hoc and based on what they are able to gather during the day. Some are able to catch fish, but this depends on having nets. These are expensive, with one interviewee stating that they cost 3,000 SSP (approximately \$23). Fishing equipment is also described as difficult to get hold of, available for purchase in towns such as Bor or Malakal, which are difficult to reach. Having an income can provide a means to buy items such as dried fish and sorghum. One interviewee who worked as a military policeman stated that his family could buy sorghum if he received his wages, otherwise their meals would only consist of water lilies.

Unlike households within the two interview sites in Warrap, in Thokchak most interviewed households did report accessing food aid

from WFP. This appears to be mainly the provision of sorghum, which households add to their meals of water lilies. This aid was usually available every 3–4 months, but some interviewees noted that this can be delayed, pushing availability to every 6 months. Our analysis shows that recipients must travel to Paguir to collect the food aid via canoe. If they do not own a canoe or cannot afford the canoe journey, they must rely on others to collect, or may not receive, their food aid. The elderly were especially disadvantaged in this regard. This raises important questions around access and the impact having to pay for canoe transport has on household incomes.

Mankuac (Warrap): In comparison with Thokchak, households within Mankuac appear to be eating even less and the number of meals consumed is very ad hoc. Many households indicated that they were only eating one meal per day. Two households were unable to give a clear structure for their daily meal intakes; one described the number of meals as being based on what they have available, while the other stated that some days they go without eating and that they are at times unsure where their next meal is coming from. One household described eating two meals a day – one in the morning and evening – but this is dependent on what income is available through selling wild fruits or receiving remittances. The interviewee noted that if they have not received any remittances, they can go 2–3 days without eating. Similarly, a female interviewee who owns a tea shop stated that business on the day will determine how many meals they have. If business has been good, they are able to eat two meals; otherwise, this will drop to one meal, and sometimes they will eat nothing.

The primary source of food for households in Mankuac is the collection of wild fruits and vegetables. However, at the time of data

collection, interviewees mentioned that these are becoming increasingly scarce due to the current dry spell. Some interviewees did suggest being able to supplement by purchasing items such as dry fish and maize flour, but it depends on household income. Household dynamics also have an impact on the availability of food. One female interviewee was pregnant at the time of data collection and was also looking after a baby and a disabled member of the family. Her husband had left to look for work and, due to her condition, the responsibility of collecting food has fallen on her young daughter, who is too young to be able to collect enough and afraid to go in the bush by herself. Unlike Thokchak, no households appear to be receiving any form of food aid. One interviewee suggested that the last time they received any form of food aid was six years ago.

Of the 15 households interviewed, 4 stated that family members had been diagnosed as malnourished. One female interviewee stated that two of her three children had been diagnosed as malnourished by Action Against Hunger. Two other households reported that children within the household had been admitted to an 'NGO-funded hospital' in Aweil and a 'nutrition centre'. A description offered by another interviewee suggested that two of their family members may have been suffering malnutrition, but did not explicitly state that they had received a formal diagnosis. This included the interviewee's wife who had just suffered a miscarriage; the scarcity of food was impacting her recovery.

Rumameth (Warrap): Like Mankuac, the amount of food consumed by households in Rumameth fluctuates depending on food availability. Among the interviews analysed, most households eat one meal a day. However, interviewees stated that if food is scarce, adults within the household skip meals to allow children to eat.

The primary source of food is wild fruits and vegetables, but when households can afford it, they will supplement either with food purchased at market, such as dry fish, sorghum or maize, or from what they are able to borrow from neighbours. One interviewee stated that an income from selling cut grass allows them to buy food from the market. Another household reported being able to supplement their evening meals with fish if their neighbour has been able to catch enough. One male interviewee stated that his wife can acquire food from neighbours in exchange for working in their houses. Like in Mankuac, households in Rumameth did not report receiving any food aid. One interviewee mentioned receiving food aid from WFP and Smile Again Africa Development Organization (SAADO) in April 2022, but there is no indication of how many within the community have received this aid.

In line with data collection from households in Mankuac and Thokchak, there was no consistent reporting of official malnutrition diagnoses among interviewees and their families. This is in spite of the fact that households were giving consistently similar accounts of changes in consumption patterns and reduced dietary intake. One male stated that one of his children had been admitted to a nutrition programme managed by Action Against Hunger, while another interviewee stated that her youngest had been treated for malnutrition in 2022. In one interview it was unclear whether some household members had received a formal diagnosis of malnutrition, but they did state that children had become 'sickly' due to a lack of food.

2.3 Somalia

2.3.1 Context: fragility, conflict and climate shocks

Present-day Somalia was founded in 1960 after more than half a century of colonial control by Britain and Italy. The fault lines of that colonial system — were perpetuated post-independence and culminated in a civil war between 1991—2012. The same rifts continue to influence a variety of conflicts and governmental disputes throughout the country (Opitz-Stapleton et al., 2022; Abbink, 2009). The Federal Government of Somalia (FGS) was established in 2012, with the Federal Member State (FMS) system following in 2015 (Majid et al., 2021). The FMS constitutes a power-sharing agreement between the four major clan families and minority non-clan groups (the ‘o.5’) known as the 4.5 political system (ibid.). Clan-based violence and political disagreements are entwined – between the FGS and FMS, and between the FMS states. The power vacuum that arose during the civil war also spawned several warlords and non-state armed groups which control significant portions of the country (ACLEDD, 2023a). The historical and continuing fragility, mainly due to political instability and insecurity, have held Somalia back in terms of socioeconomic development and continue to contribute to widespread displacement.

It is against this backdrop of fragility that various forms of violent conflict occurred in 2022 at this project’s three study sites in Southwest State: Baidoa in the Bay region – the largest city and one of the declared capitals in a Southwest State political dispute; Barawe, a coastal city in the Lower Shabelle region and the other declared capital; and Elbarde, a town in the Bakool region bordering Ethiopia. There were significant tensions between the Southwest’s

sitting president and supporters of opposition state parliamentarians over the decisions to delay elections in 2022 and extend President Laftagreen’s term by a year (Goobjoog News, 2023). These tensions partially originated in accusations of FGS interfering in Southwest State’s elections in 2017–18, with the FGS allegedly installing Laftagreen in office (Abdi, 2018). These tensions erupted into battles between the respective groups’ militias. Current FGS President Hassan Sheikh has been working on a reconciliation process with the Southwest’s most powerful federal politician, the Speaker of the parliament’s lower house, aiming to hold state parliamentary and presidential elections by January 2024 (Goobjoog News, 2023). Since the intervention of the FGS president, tensions and battles between state political militias have considerably decreased.

Non-state armed groups are another major instigator of violent conflict in Southwest State. Areas of the Somalia–Ethiopia border are contested (Hagmann and Khalif, 2008), and this tension has been exploited by various Somali armed groups. Somali based non-state armed groups began launching raids across the border from the Bakool region into Ethiopia in the mid-1990s (CISAC, 2019). Non-state armed groups based in Somalia began cross-border attacks following Ethiopia’s and the United States’ military intervention in 2006 targeting Somalia jihadist groups (Mwangi, 2012). Ethiopia has responded by deploying and maintaining an armed presence in various Somali towns, such as Elbarde. Non-state armed groups are active in all five districts of the Bakool region. Its July–September 2022 cross-border incursion (Reuters, 2022), as well as a reported battle in early 2023 (ACLEDD, 2023b) continue to destabilise the Bakool region, including Elbarde. Non-state armed groups are also harrowing residents and IDPs in Barawe and

Baidoa. The planting of landmines along roads and shelling of communities with improvised explosive devices (IEDs) is reported to have killed or injured over 1,200 Somalis country-wide in 2022 alone (Garowe Online, 2023).

On top of this history of, and ongoing, conflict, as well as high fragility, Somalia has a challenging climate and water context. Somalia's climate is naturally semi-arid to arid, with arid regions receiving on average less than 100 mm/year of precipitation, and semi-arid areas between 400 and 700 mm/year. Precipitation is concentrated in two rainy seasons: Gu (from approximately March to June, depending on region of the country) and Deyr (from approximately September to December). It is characterised by high natural year-to-year variability, influenced by several global-scale climate processes such as the El Niño Southern Oscillation (ENSO); deficient Gu and Deyr rains are associated with the La Niña phase of ENSO (Funk et al., 2016). Water availability and quality are limiting factors for agropastoral and pastoral livelihoods, as well as urban growth. The Shabelle and Jubba rivers flow only in the southern regions, with sections of the rivers containing little water during the dry season due to overextraction for irrigation in both Somalia and Ethiopia (Opitz-Stapleton et al., 2023). The other areas of the country rely on aquifers with low to moderate yield and dependence on rainfall for recharge. Overpumping and the widespread drilling of borewells and shallow wells have contributed to widespread water insecurity (Government of Somalia, 2018).

These complex and ongoing fragility and conflict dynamics have culminated to make Somalis – the majority of whom rely on agropastoral livelihoods – highly vulnerable to climate shocks. Somalis have had to contend with floods, droughts, heat waves and locust plagues in the past few decades

(Opitz-Stapleton et al., 2022) – and non-climate stressors such as price inflation and disruptions of remittances due to COVID-19 (Mayhew et al., 2023; FSIN and Global Network Against Food Crises, 2023). As of January and February 2023, when this study's interviews and focus groups were conducted, Somalia (and the Greater Horn of Africa) had experienced five failed rainy seasons linked with rare triple-dip La Niña conditions in the Pacific Ocean (WMO, 2022) and higher temperatures and evaporation due to climate change (Kimutai et al., 2023). 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). Rainfall has previously caused flash flooding that has displaced people in parts of the Bakool region; the intensity and frequency of flood events in southern Somalia is likely to increase due to climate change even as the risk of meteorological drought increases.

The occurrence of multiple (consecutive and some concurrent) conflict and climate shocks have acted in concert to drive widespread displacement in Somalia. The consecutive droughts of 2011–2012, 2016–2017 and 2021–2023, along with clan-based violence, non-state armed group attacks and government conflicts, were given as the primary reasons for fleeing to IDP camps at the three study sites, and as disrupting lives, livelihoods and food security. Depending on the site, however, various forms of conflict were mentioned by study participants as being the primary drivers of displacement.

2.3.2 Conflict and climate hazard impacts on livelihoods

Common findings across the three Somalia interview sites

Violence and coercion by non-state armed groups are major drivers of livelihood and food insecurity at all three sites; the political tensions that persisted through 2022 also contributed. The layering of non-state armed group taxation of farm produce and livestock on top of poor yields was cited by focus group participants as prompting them to relocate to the IDP camps or to urban areas. Those displaced often had to pay taxes en route, as non-state armed groups did not want to lose revenue due to people moving to government-controlled areas. A non-state armed group has banned the collection of firewood and cutting trees in Baidoa and Barawe, and this has negatively impacted women's incomes and food security, as they were the primary collectors. Women living in the IDP camp in Elbarde collect firewood only in large groups for protection.

Sociopolitical fragility and conflict beyond non-state armed groups impact casual labour and occasionally the ability of IDPs to find refuge in camps. Some study participants were caught in the crossfire between the President of Southwest's forces and the opposition forces until the brokering of the ceasefire, and in government campaigns against non-state armed groups. On days when fighting broke out, people went hungry as food markets stayed closed and there were no opportunities for day employment. In Elbarde, the IDP camp is situated between the military camp and the 'local militia' group. Whenever fighting broke out between the two camps, IDPs were displaced from the camp and had to take shelter in local schools.

Clan dynamics also play a role in interpersonal disputes and affect the ability to find refuge within the IDP camp at Baidoa. The camp manager and many of the IDPs are from the same sub-clan. Two of the IDP interviewees mentioned that it had been difficult initially to secure a plot of land on which to build their shelter as they were from a minority clan; they also felt unable to ask for assistance to secure food, shelter materials or help in mediating disputes with other IDPs because of their minority status.

Women and girls report facing disproportionate impacts on their livelihoods, social status and well-being as the result of gender-based violence (GBV) at the hands of multiple perpetrators. Women and girls who have been assaulted face high rates of social stigma and are being denied casual labour opportunities and/or are too afraid to leave home. Outside of IDPs in Baidoa, women interviewees reported having no access to medical and psychological support in the aftermath of attacks. Those internally displaced women and girls with husbands or male relatives living in the household are also facing higher levels of domestic violence. Interviewees reported that many male IDPs are jobless and suffering despair; this hopelessness is erupting into violence at home. There are high divorce rates among the IDPs. One woman had asked her husband for money to take care of her children and he divorced her. Another's husband was taken to Eritrea by the FGS for training and cut off contact with her; she has since remarried (though still technically married to her first husband) in order to be able to feed her children. Those women facing domestic violence reported being advised to remain with their husbands by community elders or leaders and given no solution to their situation. Those women who have faced sexual violence are also rarely able to get justice. In only one instance did a women's focus group report

that a perpetrator had been caught, and in this case the woman's father was unwilling to press her case as it was 'too much of a hassle' for him.

The security is not good and it has affected everyone especially at night. The women and girls can't go anywhere far from their home and even the home is not safe because these are not strong structures and one can easily come in and steal something or even assault the women. We had a case of women who went to fetch firewood and were assaulted but for that we have no support that we get and the women are not taken care of in case of an assault. (Woman in Baidoa IDP camp)

Children are working to supplement household incomes, particularly if the household is headed by a single woman or is one with disabled/ill family members.

Children as young as nine are working to help support the household, dropping out of school due to the inability to pay school fees, as reported by interviewees across all three sites. Boys take on jobs such as shining shoes or migrating to other villages without parents, in order to send back money to the household. Young girls seek to be hired on as domestic help within more affluent host community households, take on washing, and assist in collecting firewood. Children are exposed to violence, risking being robbed and having their work supplies taken (as one interviewee reported happening to her 13-year-old brother whose earnings and shoe shining supplies were stolen). Girls face the risk of GBV, and this has caused some parents to forbid their daughters from working as housemaids.

Site-specific perceptions on conflict and impacts on livelihoods

Baidoa: All 17 interviewees in Baidoa were concerned about political violence and attacks from armed groups. The camp manager indicated that she is forced to pay protection money ('zakawaat') to non-state armed groups, although she reported that she has not paid recently as the camp has not received any recent aid from humanitarian organisations. There are gender-based differences in conflict impacts on well-being and livelihoods for IDPs in the Baidoa camp. Women and girls living in the camp, particularly those in female-headed households, are frequent targets of thieves and face a high risk of sexual assault. Action Against Hunger has opened a room in the hospital to provide psychological support for assault survivors, but not all are aware of it and many women must deal with the trauma on their own. The threat of rape and violence (including breaking-and-entry into tents headed by women in the IDP camp) has reduced women's income as they can no longer collect firewood – selling firewood in the town had been an income source for women. Consequently, household incomes for food are also reduced.

Boys and men risk being killed, kidnapped and forcefully conscripted to various armed groups. Some interviewees and focus groups mentioned forced conscription to training in Eritrea, but were either unclear or were reluctant to name who was conscripting them. (The FGS has only recently acknowledged that Somalis are being sent to Eritrea for military training as building a force against non-state armed groups (Faruk, 2022)). Study participants mentioned that one such conscription raid had taken place in the camp the night before the focus group; this was corroborated by residents of the town. Youths face a particularly high risk of violence. Interviewees and focus group participants

mentioned youths being killed or held by both sitting government and opposition forces up through 2022, as they risked being accused of being supporters of one side or the other in the political dispute, or of belonging to non-state armed groups.

Barawe: IDPs in Barawe reported being largely displaced due to non-state armed group taxation on top of the current drought impacts on crops and livestock. Focus group participants indicated that non-state armed groups continue to collect taxes, taking one-third of their already meagre harvests and demanding livestock despite the drought impacts. In the face of these circumstances, some interviewees reported that they faced starvation and had to flee at night to the IDP camp to avoid detection by non-state armed groups. This was particularly difficult for the disabled or those carrying disabled family members.

All the Barawe IDPs interviewed had relocated to the area within the last year. These are the most job-insecure, relying on day jobs such as firewood collecting, gravel digging or clothes washing for households in town. Newer arrivals (in the last three months) are particularly badly-off and are resorting to begging, as they do not know how to participate in the local casual labour market. Newer arrivals are living in particularly poor conditions, in wooden shacks they construct with scavenged materials and brush which are prone to damage in winds; longer-established IDPs are living in tents provided by the Juba Foundation.

Ongoing non-state armed group violence, as well as violent conflict between federal parliamentary militias and non-state armed groups during the 2022 elections, have disrupted the local economy and caused injuries. Two interviewees mentioned that family members were injured in attacks during

the election period, in which clans fought over representation on the Barawe District Council; the households are still dealing with medical costs. Others reported injuries due to shelling and landmines planted along roads. Intense periods of shelling inhibit people from working, as they are unable to leave their homes or the shelters at the IDP camp.

The Barawe IDP camp is located outside the city. Local Juba Foundation staff, the host community and IDPs all mentioned during interviews, focus group discussions and in informal off-record discussions that they have significant fear of non-state armed groups. Their presence also shortened the window for conducting interviews, as local researchers had to return to town well before dark. While both male and female participants felt relatively safe in town, women and girls do not feel safe going out at night in the IDP camp.

Elbarde: Many of the interviewees are IDPs or hosts who were displaced to Elbarde during the 2016–2017 drought and who have settled permanently in town or in camp. Our local researcher reported that many were actually Ethiopian, based on dialects spoken, and focus groups estimated that approximately 70% of the IDPs were Ethiopian (so, technically, refugees).

Non-state armed groups are inhibiting movements from IDP camps into the town, and for town inhabitants. As a result, it is becoming difficult for IDPs to leave camps for day labour, the primary income source, which includes activities such as collecting firewood to sell. Fetching water is also dangerous, and women and girls risk being attacked and raped by non-state armed groups if they try to move about, so men have now taken this on. The presence of non-state armed groups also makes it difficult for goods to enter the town,

and was a factor cited by some as contributing to the food price increases and shortages of maize and sorghum, which must be imported from Ethiopia or Mogadishu. Since all (including IDPs) must purchase imported food from the town markets, because growing crops is impossible due to the drought, this conflict-related insecurity is contributing to impoverishment and hunger. The presence of non-state armed groups on town outskirts – and possibly infiltrating the IDP camp, according to off-record conversations with some interviewees and local Action Against Hunger staff – is the primary source of insecurity as cited by host and IDP interviewees. This insecurity is cited as a major concern by 10 out of 18 interviewees, but interviewees were afraid to answer directly in the interviews; seven either refused to answer the question outright or said they could not talk about it. One female interviewee said ‘Conflicts have occurred around the area, but we can’t explain that because of insecurity. I don’t want to talk more about it. Let’s stop there, please.’

2.3.3 Cascading impacts on food security and nutrition

Common findings across all three sites

Food and nutrition security is poor among all IDPs and some host community members due to the combined impacts of fragility, persistent conflict and ongoing drought on livelihoods. The inability to earn steady and sufficient incomes through day labour due to the ongoing conflict, in addition to the inability to grow vegetables and other crops or keep livestock because of the ongoing drought, is having significant impacts on the food and nutrition security of both IDPs and the host communities. Diet diversity is poor across all three sites, with all interviewee and focus group participants purchasing imported rice (as the cheapest option), spaghetti and, occasionally, wheat flour, sugar and oil from the markets.

Most of those interviewed indicated that their diets and number of meals per day had not changed in comparison to the previous year, indicating that reduced food consumption and lack of diet diversity have been multi-year challenges. Interviewees and focus group discussants, both hosts and IDPs, are aware that their diets are not nutritious and note that they are weakening and more prone to illness. Due to the lack of stable, well-paying employment opportunities and the reduced availability and high prices of vegetables, maize, sorghum, meat and milk, people indicated that they have no recourse to better nutrition. After consecutive years of conflict and climate shocks, people have few assets left to sell as a coping mechanism; even if they did, there are few buyers left, as all face significant financial insecurity. Securing food through labour, particularly poorly paying and physically demanding work, is a daily concern.

Women face higher burdens of (likely underdiagnosed) chronic malnutrition and potential health issues, due to cultural preferences that contribute to gendered vulnerabilities to climate and non-climate shocks. Women at IDP camps, and in some interviews with host community households, indicated that they are eating whatever food remains only after children and men have eaten.

‘The children and men are given the first priority and for the women, we have to be patient. If there is enough, we eat and if there isn’t, we prioritise the men and the children’
(IDP women’s focus group)

Women-headed households caring for children and/or disabled family members face the highest food insecurity burden, as they must balance child/disability care with finding work for the day to feed

their children. Additionally, as most daily earnings are diverted to purchasing food, women reported being unable to afford to purchase sanitary kits to meet their or their daughters' menstrual needs. A few men mentioned gendered food and nutrition security differences, noting that their wives have become weaker and are suffering incidences of dizziness and fainting, but did not connect their wives' health status with women taking lowest priority in household food consumption.

Those living with disability or chronic illness, and carers of disabled/ill people, also face significant security, nutrition and health challenges not faced by others. At each of the IDP camps, focus group discussions were held specifically with those living with disability and/or caring for a disabled or ill family member. They described the difficulty of even fleeing to IDP camps, with journeys slowed by, for example, the need to carry those with mobility issues (or to be carried). Those being carried faced a higher risk of injury due to the potential of being dropped or colliding with vegetation, particularly as most of the journeys occurred at night to avoid being spotted by non-state armed group patrols. Health and safety are worse for the disabled and ill than for healthy individuals. Across all three sites, none of the latrines are accessible for disabled people; they must rely on family members to carry them to bathrooms and assist them in toileting. With adult family members gone during the day for jobs, it is possible that mobility-impaired people are only able to use toilet facilities once or twice a day and thus may face higher risk of bladder infection, as well as skin sores and other infections (though these were not mentioned or asked about). Focus group participants mentioned that disabled people are preyed upon, with walking sticks and other mobility aids often stolen. Households in which all adult members are disabled or ill are also

likely at very high risk of malnutrition and food insecurity, as they must beg for food or money if they are unable to work.

Interviewees are largely unaware of the eligibility criteria for accessing food aid and express frustration at trying to secure it for their households. Food assistance programmes are divided between managing severe acute malnutrition (SAM) and moderate malnutrition (MAM), with different eligibility criteria determining who is able to access in-patient medical centre stabilisation care, ready-to-use therapeutic food (RUTF) and targeted supplementary feeding, and over what time frames (Government of Somalia, 2021). Such programmes target children between 6 months and 59 months, and pregnant and lactating women, as specified in the Ministry of Health and Human Service's *Guidelines for Integrated Management of Acute Malnutrition* (ibid). Men, women and older children facing chronic (or acute) malnutrition are not eligible for such food aid. Interviewees and focus group participants are not aware of eligibility criteria or why they have stopped receiving food or cash aid when they received it in the past, or why some of their children are denied medical care. 'Both sons have been denied nutritious foods because of their age, but they are thin like malnourished children' (a host community mother in Elbarde, speaking of her 10- and 14-year-old sons).

Site-specific perceptions on food and nutrition security

Baidoa: Malnutrition and hunger are likely to be underreported among both children and adults. Of the 16 interviewee households, 14 are eating only one or two times a day. This was also common among those participating in focus group discussions. Both IDPs and members of the host community interviewed are dependent

on day labour in Baidoa. However, there is an insufficient number of jobs, and those that are available are insecure. None of those interviewed are able to grow or produce their own food. As a result, people are spending anywhere from 70–100% of their daily earnings on purchasing food. Interviewees stated that if they were unable to work that day, they would have to go without eating. The dominant food purchased and consumed is rice, as people can no longer afford to pay for meat, vegetables, fruit or other grains. The adults forgo eating in order to feed their children. The camp manager is personally taking on loans to cover food purchases for households caring for disabled family members, as reported by multiple interviewees and in the focus group discussions. At the same time, the camp manager herself is also caring for several orphaned children.

Five interviewees reported that their children had been diagnosed by Action Against Hunger as being malnourished and have received or are receiving RUTF. Interviewees did not report on follow-up visits, so it is possible that some have relapsed into malnourishment. It is not known at what point parents bring children to the health centre – this would require one of the income earners to forgo working, meaning less food for the family that day. People might only be seeking the help of the health centre when children are exceedingly ill.

Barawe: The living, food security and nutrition situation of IDPs in Barawe is particularly poor, as observed by the local researcher. Interviews and focus group discussions were shorter in duration than at the other two sites as participants were too hungry and had low energy for discussion. Most IDP interviewees and focus group participants are eating only one to two meals daily, largely consisting of rice and spaghetti purchased from the market, and are spending 100% of daily earnings on food and water purchases. Adults

will skip meals to ensure that children, the elderly and disabled are fed first. However, households in which the breadwinners have become disabled are faring the worst and often eat a single meal daily; one reported resorting to feeding her children sugar water, as that is all she can afford. Of 17 people interviewed, 9 had a child who has been, or is currently being, treated by Juba Foundation and receiving RUTF. A few hosts, either with more stable jobs like shopkeeping, trading or midwifing, or in combination with remittances or cash aid, are occasionally able to purchase fish and eat two to three meals daily; these households also reported spending 50–77% of their incomes on food.

Tracking of aid recipient needs is not as robust by the Juba Foundation. Only those receiving malaria, medical support or RUTF are recorded, and even these beneficiaries come to the facility irregularly, making consistent monitoring difficult. Interviewees and focus groups complained that RUTF is only available for weaker children, and not to anyone else (see Section 3.1, Recommendation 3 for discussion on eligibility criteria). Our local researcher met with the Barawe District Commissioner, who indicated that there is a shortage of supplies at the hospital, particularly lab testing kits for malaria, and who was uncertain about restocking schedules. The person in charge of the local hospital also corroborated that RUTF is only for children under five and is distributed only on Tuesdays from the Juba Foundation.

Elbarde: Neither the hosts nor the IDPs interviewed or participating in focus group discussions were food-secure. None have received any food or cash aid for the last two months, which some attributed to the fighting between the government militia and non-state armed groups. All are highly dependent on cash transfers and have significantly cut back on food consumption. The majority described eating one meal per day,

with some reporting that adults will not eat for multiple days in a row so that children can eat. Interviewees said that food consumption for the past two years has been generally poor for most. They described diets which largely consist of spaghetti, rice, wheat flour, sugar and occasionally oil, with most solely relying on a diet of rice. Similar to Baidoa, none of those interviewed can afford meat or milk, and these are seldom available for sale. Traditional foods and those expressed as preferences, such as maize and sorghum, are rarely available at the market. Other food types, such as vegetables and beans, cannot be purchased or grown due to the drought.

Of the 17 interviewed, only 4 have had children formally diagnosed as malnourished. One complained that her children were denied assessment because they are too old. Another thought one of her sons might be malnourished as he is 'thin and weak', but as a single mother working as a casual labourer, she cannot afford to stop working for the day to bring him to the hospital; this would result in the whole family having to go without food.

2.4 Mali

2.4.1 Context: fragility, conflict and climate shocks

In January 2012, fighting broke out in Ménaka between the Tuareg-led separatist Mouvement de Liberation de l'Azawad (MNLA) and Malian armed forces (FAMa). Jihadist groups linked to Al-Qaeda in the Islamic Maghreb (AQIM) – present in the north for several years – formed an alliance with the MNLA and quickly won control of the three regional towns (Gao, Timbuktu, Kidal) taking advantage of the confusion caused by a coup d'état in March. The alliance fell apart

almost immediately, however, with Jihadist groups imposing strict sharia law and harsh punishments on local people.

As the FAMa and their international partners battled to take control of these three northern regions, the number of people displaced by the conflict rose steadily, with the fear of violence with the fear of violence compounding existing food shortages. Numbers reached a peak in June 2013 with 354,000 people displaced within Mali (IDP) and 168,000 refugees in neighbouring states. They began to fall after the arrival of the United Nations Multidimensional Integrated Stabilization Mission (MINUSMA) and continued to do so over the next two years, as peace negotiations with Tuareg separatists – represented by the Coordination des Mouvements de l'Azawad (CMA) – progressed. By October 2015, a few months after the CMA signed the Algiers Peace Agreement, there were only 63,000 IDP (<20% of the peak) and 138,000 refugees (IOM, 2015).

However, while attention was focused on establishing peace with the Tuareg separatists, a group in central Mali, Katibat Macina, began attacks against security forces. Over the next few years, as this violence continued to escalate, a coalition of jihadist groups, the Jama'at Nusrat ul-Islam wal-Muslimeen (JNIM), was established. This linked Katibat Macina and other armed groups to the international jihadi movement and greatly increased their capacity. Attacks against MINUSMA and the FAMa multiplied, and violence against civilians soared, causing over 800 civilian fatalities every year since 2018.

The numbers of displaced people rose quickly again as the violence increased and the focus of the conflict shifted southwards. While there are currently around 400,000 IDP in Mali and over 200,000 refugees in neighbouring states,

many more than this have been affected by displacement since the conflict started. Tracking has identified over 776,000 former IDP who have been able to return home since 2012 and 85,000 former refugees are registered with local authorities throughout Mali (IOM, 2023).

2022 was the deadliest year ever for Malian civilians, with 4,872 fatalities reported (ACLED, 2023). One contributing factor was the arrival of a Russian military cooperant group (ACLED, 2022), fighting alongside the FAMA and Dogon-led militia groups in central Mali. Another was hostilities between the newly emerged Islamic State in the Greater Sahara (ISGS) and the al-Qaeda-affiliated JNIM, fighting for control in the tri-border area (the regions of Ménaka and Gao). JNIM remains the most active armed group in Mali, responsible for more attacks than IGCS and FAMA combined, and continuing to expand towards Bamako, the capital (ACLED, 2023c).

The Timbuktu region, where this study was carried out, is currently host to some 50,000 IDP (IOM, 2023), and therefore perceived as relatively peaceful – but FAMA and MINUSMA troops remain key targets of the jihadist groups that are present throughout the region. In the first quarter of 2023 there were five attacks against MINUSMA convoys on the Timbuktu–Ber axis, and an attack by JNIM against the military camp at Acharane that killed two Malian soldiers (ReliefWeb, 2023d). Civilians are at risk of robbery and kidnap, especially when travelling on the roads. Around 40 separate events of violence against civilians, including several fatalities, were reported in the Timbuktu region in the 12 months to April 2023 (ACLED, 2023).

This complex fragility and conflict context creates and perpetuates vulnerabilities to various climate shocks and non-climate stressors for livelihoods, based largely on rainfed agriculture in the south,

irrigated agriculture in the centre, and nomadic pastoralism in the arid north. Mali is naturally a land of climate extremes, with the regions of Timbuktu, Kidal and Gao consisting largely of hot, arid desert and the northern halves of Mopti, Ségou, Koulikoro and Kayes of hot, arid grassland. Mali receives much of its precipitation in a single rainy season, from June to October, associated with the West African monsoon (WAM). Rainfall is highly variable both spatially – ranging from less than 200 mm per year in the north to 1,300 mm per year in the south (Halimatou et al., 2017) – and temporally, with dry spells during the rainy season and high variability from year to year (Holmes et al., 2022).

The months immediately preceding and at the start of the rainy season – March to August – are known as the hungry season, when access to food is most difficult for rural households. West Africa, including the Sahel region of Mali, experienced significant drought during the 1960s and 1970s, contributing to significant food insecurity and famine (Druyan, 2010). The WAM is modulated by the Atlantic Multidecadal Oscillation (AMO) – with cycles of approximately 60–80 years (Paeth et al., 2017) – and to a lesser extent, ENSO (Holmes et al., 2022). Since the late 1980s, rainfall amounts during the monsoon have increased, coinciding with a shift in the state of the AMO (Odoulami and Akinsanola, 2018; Holmes et al., 2022). The monsoon is now starting later than it used to and more of the rainfall is occurring in intense events that contribute to flooding (Holmes et al., 2022), which has been noted by some of the interviewees (see following report sections). Agricultural production of cereal crops has expanded significantly since the 1970s, attributed to increasing yield, large-scale rice irrigation and various agricultural support programmes (Giannini et al., 2017). However, climate change projections indicate that rain

during the monsoon is increasingly likely to fall as shorter and more intense events that can contribute to flooding, while the likelihood of drought will also increase (Holmes et al., 2022).

2.4.2 Conflict and climate hazard impacts on livelihoods

Common findings across the three Mali interview sites

Men and women in all three sites are fearful to travel outside their own village due to the risk of kidnap and robbery by groups of armed men, probably affiliated to JNIM, but typically referred to simply as ‘bandits’. Farmers have abandoned distant fields; traders go to fewer markets or have stopped trading all together; herders keep their flocks closer to the village; women and girls are afraid to go to the vegetable gardens, to wash clothes at the river, to collect firewood in the bush and to harvest grass to weave mats. In the villages, the armed men demand ‘zakat’ (a share of the harvest) and use the threat of raids and kidnap to maintain control. Some people are afraid to visit community health centres, which in any case are closed after dark.

Conflict and climate hazard impacts affect livelihoods and well-being across all three sites. As fear has reduced the potential of men and women to produce and earn a living, so prices for fuel and fertiliser have increased at least in part due to the conflict, making it harder to restart production each year. In the uncertain climate, yields are low and flood damage means some farmers harvest nothing at all. Farm and off-farm employment opportunities are reduced and young men who travel to find work elsewhere face the risk of being robbed on the way back.

The gendered impacts of poor harvests further reduce women’s ability to contribute to household

financial stability and food security. Poor rice harvests mean fewer opportunities for women and girls to work as day labourers earning rice for themselves or their households. Women can no longer use surplus rice from the household store to barter for meat, fish and condiments and meet other small household needs without needing to ask their husbands. Women, responsible for ensuring the household has something to eat every day, are particularly concerned by the sharp rise in the price of rice and the prospect that it will rise even more during the hungry season.

Site-specific perceptions on conflict and impacts on livelihoods

Arnassaye: The village of Arnassaye is an agricultural community southeast of Timbuktu in the commune of Ber. All the men interviewed identified as farmers, growing rice on fields within the flood zone of the Niger river, and, in a few cases, vegetables in small gardens too (okra, squash, watermelons). Only one said he raises and sells livestock, as a secondary activity. Men’s off-farm activities include making mud bricks, building houses, cutting and selling fodder (bourgou) and other casual work. The women interviewees are crafters (weaving straw mats), vegetable gardeners and petty traders. Ill health and returning from working in Senegal were the only reasons given for stopping a previous activity. All the interviewees were from Arnassaye and none of their households were hosting IDPs. The principal language spoken is Songhai. There is a MINUSMA base in the commune town, Ber.

Flooding has significantly impacted rice production in Arnassaye for several years with rapidly rising floodwaters overwhelming and destroying crops. A group of farmers estimated that 60% of households had poor harvests last season. However, they and many others

also pointed out that rapid flooding is not the only problem. The seasonal rainfall pattern has changed, too:

The rainy season doesn't start early, and we don't start working until the rainy season arrives. If we don't start cultivating early, the seeds don't grow enough to withstand the rising waters, yet we don't have the rain to germinate the seeds. (FG, Arnassaye)

With rice as the basis of the local economy, poor harvests have knock-on effects that go beyond the immediate concerns of the men who produce it. As one man recognised, when production is good 'women buy small household needs without the man even knowing'. One of the women expanded on this when talking about the impact of price increases combined with poor harvests:

The women are impacted by this. They are the ones who manage the harvest store most of the time and it is with the paddy rice that they barter to get condiments (cube Maggi, fish, salt, etc.) and other necessary items for the household (soap, tea, sugar, etc.). (KII, Arnassaye)

Young men and women were able to work for other farmers, earning some rice for themselves or to contribute to the household. One woman, who relies for income on buying rice after harvest and trading it, said she was struggling to buy what she needed because of low availability and high prices. Other women were already worried about what rice will cost them next hungry season, given that the price did not drop after harvest as it usually does. Layering of poor harvests and the fear of robbery or kidnapping by 'men with guns' were consistently cited by interviewees and

focus groups, as impacting food security. The men (rice farmers) have abandoned their more distant fields because of the risks including – according to young men – being robbed of the motorbikes they use to get to those fields. Women are afraid to go out of the village in search of fuelwood and the straw they need to make mats, and have abandoned two of their market gardens. Young girls are frightened to do laundry at the river.

Freedom to travel to other localities has been seriously affected. Men and women alike fear attacks on the roads to neighbouring market towns and Timbuktu, which in turn affects their ability to trade produce and buy food. Because of the crisis, the village no longer has its own market and there is less food available as a result. Young men who travel to find work face the risk of being robbed on the way back. Similarly, women are scared to visit relatives in the cities. People are afraid to visit the community health centre, especially at night, and by dusk it is closed.

Despite (or perhaps because of) the climate of fear in the village, only three specific incidents were mentioned. One interviewee was attacked and had his wooden fishing boat destroyed. In another incident, men referred to as bandits had collected 'zakat' (10 measures of rice) from the farmers this year. The most significant incident, however, at least in terms of intimidating the villagers, was when the village chief was kidnapped, held captive for four days and released unharmed. 'All we could do was cry,' said one interviewee.

Today community elders tell the young people to do what the Islamists ask, notably to stop their 'entertainment and leisure activities'. But evidently the youth do not always listen, since, as one group reported: 'Last week there was a wedding. People

were listening to music and dancing until someone told them that kidnappers were coming, and everyone ran away’.

Hondo Bon Ababer: Hondo Bon Ababer is an agricultural community situated in the floodplain of the Niger river approximately 25 km southeast of Timbuktu, in the commune of Bourem-Inaly. Like Arnassaye, all the men interviewed (11) identify as rice farmers, and a few also have small vegetable gardens. Off-farm activities were similar, including fishing, cutting grass (fodder), masonry and other casual work. The women interviewed (2) earn income from crafts, petty trade, (vegetable) farming and sometimes from selling firewood and raising livestock. Only one interviewee had moved recently to the village – though he did not identify himself as an IDP, saying he came eight years ago (i.e. 2015) after marrying his wife who was born in the village. None are hosting IDPs in their households. There is no community health centre in Hondo Bon Ababer and the village comes under the health sector of Bourem-Inaly. The principal language spoken is Songhai.

Flooding, or floods combined with a late start to the rainy season (drought), have significantly impacted rice production in Hondo Bon Ababer, in much the same ways as in Arnassaye. Late and unreliable rainfall delays sowing and slows growth. When the water arrives, rice plants that are too young and weak to resist the rapidly rising floodwaters are destroyed. Yields are very low and some farmers harvest nothing – a huge loss in terms of their investment in labour, seeds, and cash. Women’s vegetable gardens are also affected by the combination of floods and insufficient rain. One, who saw her entire production destroyed, expressed concern about the cost of starting again: ‘Tomato seeds have also become too expensive.’ Only three interviewees (two men and one woman) were more concerned about the

challenges of the dry/hot season and specifically the long distance to get water during this period. All three were from poor or very poor households and primarily concerned about access to food and to health services, rather than agricultural production.

Layering of poor harvests and the fear of robbery or kidnapping in the bush or on the roads were consistently cited, although only one interviewee mentioned a specific incident: ‘I was held up and robbed of my motorbike in 2021.’ A relatively wealthy farmer framed the issue as one of land tenure – ‘the bandits say that the land belongs to them’ – whereas others spoke of the ‘kidnappers’ and ‘armed bandits’ that put ‘fear in your stomach when you go to the fields’.

As in Arnassaye, ‘the men were forced to leave the fields far away because of the fear linked to insecurity’. Off-farm activities are affected, too. Men are afraid when travelling or going to local markets. Women and girls are afraid to go in search of firewood, collect material for making mats, or go down to the river in the dry season. Young men no longer have enough work nearby and are afraid to seek work elsewhere because of the risk of being robbed on their way back.

Tintelout: The village of Tintelout is an agropastoral village on the floodplain of the Niger river, about 40 km southwest of Timbuktu, in the commune of Alafia. It is smaller than the other two study sites, with approximately 500 inhabitants; the principal language spoken is Tamashek, the language of the Touareg people. In 2021, the village benefited from a MINUSMA-funded rehabilitation of their rice perimeter and market gardens, and the Norwegian Refugee Council carried out a rapid assessment following the arrival of an estimated 650 IDP in the locality.

None of interviewees were host to any of these recently displaced people, but at the beginning of the 2012 crisis (the Tuareg-jihadist insurgency) the people of Tintelout fled and the village was looted: ‘When we came back, we found nothing in our houses.’ One interviewee had been in the Mberra camp, and another referred to ‘people in our community who have left the Mberra and Lere camps’. One of the women had moved from Bamako to Mauritania, then back to the village, five years ago.

Most of the men interviewed (seven of a total nine) are rice farmers, though one said first that he was a market trader, and two combined rice farming with animal husbandry. One of these farmers also grew vegetables. Of the two other men, one earns his living breeding goats and the other is a community health worker. Dry-season, off-farm activities include making bricks (banco) and masonry and, in one case, working as a security guard in Mauritania for six months or more at a time. The four female interviewees are traders or grow vegetables. One said she did both (selling potatoes and fried snacks) and that she also helped her husband at critical times with the rice. A second had previously done petty trade but had given it up because ‘there is nothing to sell, and rice has become too expensive lately’. A third, still trading in rice, works as a farm labourer paid in rice during the rainy season.

As in the other two study sites, flooding has significantly impacted rice production in Tintelout in recent years and was cited by nine out of thirteen interviewees, including two of the four women. One interviewee said he has not harvested for five years. The knock-on effects of flooding and poor harvests on the availability and cost of rice are affecting everyone in the community: ‘I did not cultivate this year, but I wanted to take advantage of the harvest period

to pay for a few bags of rice in reserve because at that time, the price is very acceptable,’ said another interviewee, ‘but with the floods, the price of rice is still high’. Increases in the prices of fuel and fertiliser coupled with the high risk of failure are making rice farming an unattractive investment; as one focus group said: ‘We go into debt to cultivate in the hope of surviving and repaying our debts. We invest everything in our fields, and if we don’t pay back the people we borrow from, we risk them taking us to court.’

One woman from a very poor household, relying on help from the community, is concerned about the coming hot, dry season: ‘It is the hardest time and this year’s flooding has done a lot of damage. It has impacted my food because the farmers will not be able to give us, the poor people in this village, any more [food]’. A focus group reported that the hot season is also challenging for the owners of livestock, who ‘move with their livestock to the south side of Tintelout closer to the river, where there is water and grass to meet the animals’ needs ... because in the dry season the pastoral wells do not contain enough water to meet the demand’.

In contrast to the two other sites, no interviewees in Tintelout said they were afraid to travel to their fields, or that fields had been abandoned. The theft of livestock and crops and the fear of attack when travelling on the roads to local markets were, however, consistently cited. For example, one male interviewee said:

What we are most tired of are the small bandits and radical groups. They take the zakat from our livestock and crops, without even asking for it. The bandits rob us on the roads and the radical groups impose rules of conduct and threats

on us. Everyone is affected. We can't do our activities as we wish. And we are worried all the time because we are isolated. (KII, Tintelout)

All of the women interviewees spoke of being fearful of (or prevented from) going to market, which reduces their ability to contribute to the household's financial stability and food security. Women are afraid when going out of the village to their vegetable gardens, or to collect firewood. Some do not feel safe going to the community health centre.

The conflict is also considered to be partly responsible for recent price rises for food and agricultural inputs. Combined with the impact on off-farm activities, these price rises reduce the ability of farmers to prepare for the coming season:

Since the conflict started, my movements have been reduced. It is with my movements that I take rice to Mauritania to sell at better prices, and return to prepare for the next season. (KII, Tintelout)

2.4.3 Cascading impacts on food security and nutrition

Common findings from across the three sites

Participants across all three sites stated that they are eating less food and that the meals they are consuming are of poorer quality. Our data collection showed that few are able to include meat or vegetables in their diets. Similarly to South Sudan and Somalia, adults in households within Mali will often reduce their consumption in order to ensure that children have enough to eat. Using the Action Against Hunger household wealth categorisation, data collection revealed

that 'wealthy' households also had to make changes to their daily consumption patterns. As they move into the hungry season, food security for communities in the Timbuktu region is expected to deteriorate over the next quarter of 2023. Predictions by the OCHA Food Security Cluster in Mali for June–August 2023, the hungry season for farmers, show 259,000 people living under pressure and a further 92,000 at the critical stage of food security – up over 40% on figures for March–May (ReliefWeb, 2023c).

Arnassaye: Most of the interviewed households in Arnassaye reported a change to their daily consumption patterns. The majority of households (12 out of 15) reported eating three meals a day. However, the overall trend is that these meals are smaller. Adults reported eating less to ensure that children within the household had enough to eat. Household dietary intake has changed, with interviewees stating that their daily meals now lack variety, being primarily made up of cereals such as millet and rice and excluding other types of food such as meat and vegetables. In part, this lack of diversification appears to be due to the high cost of accessing markets which have these foods available. As one interviewee noted:

We don't eat the types of food we want because there are no salads, tomatoes, cucumbers, potatoes, etc. You have to go to Timbuktu or to Bourem-Inaly, but the price of the crossing is also expensive. (KII, Arnassaye)

Overall, although household meals lack diversification, households are still spending a significant amount of their income on food. This included six households who explicitly stated that all their income is spent on food.

Despite the noted changes among households in their consumption patterns and diet, there was no consistent reporting of adults or children being malnourished. Of the 15 households interviewed, only 3 reported having children diagnosed as malnourished. This included one household with two children. No households reported adults suffering from malnutrition. From one interviewee's description it is likely that both children and adults within the household are suffering from malnutrition, but they did not state whether there had been a formal diagnosis.

Hondo Bon Ababer: Of the 15 households interviewed, a total of 8 stated that they have reduced the amount they are eating, due to the combined impacts of the floods, a poor harvest and the high cost of buying food. Five households stated that they are spending all their available income on food. Another three households reported that food costs take up at least 50% of their available income. Similar to households in Arnassaye, interviewees reported eating less so that children within the household have enough to eat. Several interviewees stated that they can eat twice by dividing the lunchtime meal in two so that there is enough to eat for dinner, thus only cooking once a day. Households also stated that they are now consuming 'poorer-quality meals'. There is a lack of diversification in households' primary foods, with most only eating rice as it is cheapest. Some are able to supplement this with millet and sorghum.

Despite the majority of households highlighting that they are eating less and eating poorer-quality meals, only two of the households reported a household member being treated for malnutrition. In both these cases, those being treated have now recovered. One interviewee reported that six members of his family have been treated for

malnutrition. In the second case, the interviewee stated that just the children in the household have been treated for malnutrition.

Tintelout: Similar to the other interview sites, households reported either eating fewer meals than the previous year, or reducing the quantity consumed during those meals. Some descriptions from households suggested that this is not a constant throughout the year, with one interviewee stating that the drop in their daily intake coincides with the hungry season. The prices of staple foods such as rice have risen due to the knock-on effects of a poor harvest. One interviewee also stated that insecurity in the area often leads to disruptions to the supply of goods and markets, resulting in increased prices for food such as millet, sorghum and beans. Several households stated that they are spending all their available income on buying food. One interviewee explained that she earns 2,000–2,500CFA (\$3.30–\$4.10) per day, of which she spends 1,000CFA (\$1.65) on food.

Utilising the Action Against Hunger household wealth survey, analysis showed that it is not only the poorer households in the community that are affected. One household that was categorised as 'wealthy' noted that their diet had become less diverse and that they are having to eat less. The interviewee stated that they are even considering taking out loans to buy cereals from traders in Timbuktu to avoid running out of food in the future.

Of the 15 households interviewed, only 2 reported having household members formally diagnosed with malnutrition; both cases of malnutrition were children. One interviewee stated that their child received treatment in 2022, while the other said their child is currently undergoing treatment and the child's condition is improving.

3 Implications for humanitarian food security programming: key learning points and recommendations

The phasing of the research project into two separate themes means that this is a preliminary set of key learning points and recommendations which are likely to expand during the second phase of the research. The recommendations below are based on the immediate conclusions of this first rapid assessment, capturing the impact of conflict and climate hazards on household food security, nutritional status and livelihood activities as reported by those communities we interviewed. The second phase will allow the research team to explore in more depth the existing humanitarian interventions in the affected areas, and their overall impact. We anticipate that these key learning points and recommendations will evolve and be strengthened after further engagement with local Action Against Hunger delivery partners and with other humanitarian programmes operating in the three countries.

Key learning point 1

Livelihood insecurity

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. Multiple livelihood activities are affected – the layered impacts of climate and non-climate shocks affect not only agricultural livelihoods but also businesses that rely on the ability of households to buy their goods and services, such as tea shops or restaurants. Households (and women in particular) cope by augmenting their incomes with additional activities, such as the sale of charcoal and firewood, or taking on laundry; however, the reliability of such activities is dependent on money within the local economy and the existence of paying customers. When most households in an IDP camp or host community are impoverished, income generation through non-farm/pastoral activities is also precarious.

Local trends in Somalia

Interviewees across the study's sites of Barawe, Elbarde and Baidoa are taking on debt to pay for food. This finding reflects other studies covering

Somalia (Mayhew et al., 2023; Weingärtner et al., 2022). Interviewees are also using other short-term coping measures: purchasing only the cheapest food (rice, which is not very nutritious); forgoing healthcare due to being unable to take a day off from casual labour and travel to health centres, along with the inability to pay for medicines; having children drop out of school due to the unaffordability of school fees and needing children to work; reducing the number of meals; and adults forgoing food so that children, the disabled and elderly can eat first. After consecutive years of climate shocks and conflict, few have any livestock or other assets left to sell for cash to purchase food and water.

Hosts and IDPs across all three sites are spending a greater portion of their incomes on food in 2023 than in 2022, due to price increases for staples like rice, spaghetti and wheat flour. However, it is not clear whether unconditional cash assistance recipients have had an increase in their monthly cash assistance to keep pace with price rises; follow-up with humanitarian actors and a survey of interventions are needed. Those receiving cash assistance and engaging in casual labour are still spending 60–90% of incomes on food, and taking on debt when the cash assistance does not last them the full month. Two groups are spending all of their incomes on food and water: those who are fully reliant on cash aid – due to having newly arrived in camp and not knowing yet how to engage in the local casual labour markets; having to care for disabled, ill or elderly household members; or having to stop casual labour activities such as the collecting of firewood due to the presence of armed groups – and those who are not receiving any cash assistance. These households are the most food-insecure, eating one to two meals a day (some days not at all) and reporting that adults forgo eating to feed their children.

The state of water, sanitation and hygiene (WASH) facilities in IDP camps is also variable. The IDP camp in Baidoa was established five years ago by a woman who purchased land from a member of her clan; she is the camp manager. She decided to set up the IDP camp after she lost all her crops to the 2019–2020 locust plague and wanted to establish a place for other agropastoralists or farmers in a similar position. The camp latrines were constructed with assistance from Action Against Hunger, and the Action Against Hunger medical centre is nearby. An Arab aid organisation (not named) dug a borewell six metres in depth. When the well stopped producing last year, the manager had to pay out of pocket to deepen it to nine metres. Access to water remains a problem, however; many must either purchase water or travel far distances to fetch it. The Barawe camp area is quite sandy, and winds have blown sand dunes over the pit latrines; individuals now go into the bushes to relieve themselves. This is creating the potential for disease outbreaks.

Local trends in South Sudan

Those who have money are able to supplement their daily meals by purchasing food. Those with cash are those with more diversified activities such as from non-agricultural wages, selling cattle and receiving remittances. 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 on occasion, these provide a valuable lifeline. Those who did report receiving remittances spoke of the difficulties accessing such funds without a

phone or bank account. People had to either travel to collect remittances, or rely on someone else to physically bring them.

Local trends in Mali

Few of the Mali participants are receiving cash assistance (some reported it as being a one-off event), though roughly a third are receiving remittances from family members who have migrated to Senegal or Mauritania for job opportunities. Households are encouraging their children to migrate abroad as an economic resilience strategy. The increased costs of farm inputs and food, coupled with fear of working in fields for personal safety reasons and poor yields due to flooding, are contributing to household financial insecurity for most study participants, including those receiving remittances. This is leading to cascading impacts on food security and nutrition for households. However, those households receiving some cash assistance from Action Against Hunger reported spending about 50–60% of their incomes on food – in comparison to those not receiving any assistance, who are spending nearly all their incomes on food.

Key learning point 2

Malnutrition

Reports of malnutrition are not consistent across interview sites.

In spite of the fact that interviewees reported a reduction in daily consumption patterns, a deterioration in diet and household members forgoing meals, they did not report many formal malnutrition diagnoses. Therefore, it is very likely that many cases of malnutrition are going undiagnosed.

Local trends in Somalia

Nearly all of the interviewees and focus group participants, and their families, in Somalia are likely to be malnourished (it is beyond the ability of this study to evaluate levels of chronic or acute malnutrition, as it was relying on reports from a limited number of participants). Malnourishment is likely to constitute protein deficiency, as few are able to purchase milk or meat, though a few in Barawe can occasionally purchase fish. Gross vitamin and mineral deficiencies are also likely, given that diets are heavily reliant on simplified carbohydrates – cheap imported rice and spaghetti, sugar and wheat flour. Maize and sorghum are particularly scarce and unaffordable in Baidoa and Elbarde.

Additionally, IDPs in the camps reported that it was difficult to access healthcare due to long distances to health facilities. Those seeking healthcare, including the diagnosis and treatment of malnourished children, must physically go to a health centre. Some self-reported as being too

weak to make the journey, while others were unable to do so as this would require them taking a day off work, resulting in the entire household forgoing food that day and possibly the next. Women are also reporting difficulty affording menstrual hygiene items, as well as a lack of pre- and post-natal care. Only one reported not being able to breastfeed, but the fact that there were five pregnant women already with young children (<3 years) among the interviewees could indicate that few are able to consistently breastfeed,⁴ which in turn suggests maternal malnutrition, risking stunted foetal development and malnourished infants. As a result of both poor diet and the circumstantial inaccessibility of healthcare, it is likely that the true rates of multi-generational malnutrition and ill health are quite high.

Local trends in South Sudan

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 the fact that the data collection showed that households were reducing daily consumption and that, at times, adults were forgoing meals to allow children to eat. Among those forgoing meals were lactating mothers, mothers who had recently suffered miscarriages and adults impacted by long-term illnesses and disabilities. Interviewees were frank in their

assessment of their daily meals, in the respect 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 disadvantage for food and nutrition security. Interviewees in both Jonglei and Warrap also described difficulties in accessing healthcare facilities due to their remote access.

Local trends in Mali

Only 4 interviewees out of a total 45 across the three sites reported having children formally diagnosed as malnourished. Yet, similarly to the Somalia and South Sudan sites, the lack of diet diversity and self-reported reduction of food intake by adults in order to feed children is likely to indicate protein, vitamin and mineral deficiencies. Those households subsisting primarily on rice are more likely to be malnourished than those able to afford millet and beans, which can provide more complete protein, minerals and vitamins.

4 Breastfeeding has been found to provide up to 26 months of contraception for the mother by inhibiting ovulation, with a known effectiveness as a contraceptive of up to 98% of the first six months postpartum (Blanco-Murillo et al., 2022). That women are reporting becoming pregnant while caring for an infant could be an indicator of inability to breastfeed. The reasons why the women may not (be able to) breastfeed are likely multi-factorial, with some related to food insecurity. Many of the women interviewed in Somalia are participating in local casual labour markets and reported leaving their children either at home (host community) or at the IDP camp. Irregular breastfeeding reduces breast milk output. Severe maternal malnutrition, which is possible among some of the women interviewed and needs to be corroborated through a formal health assessment, can also be a factor in reducing breast milk output. Webb-Girard et al. (2010) have examined how multiple factors culminating in food insecurity among women in Kenya contributed to reduced breastfeeding.

Key Learning point 3

Livelihood decisions

Communities are having to make livelihood decisions in the absence of information that could help both their short-term and long-term decision-making.

Local trends in South Sudan

In South Sudan, the interviews suggested there is a lack of weather-based information and/or early warning systems informing interviewees' decision-making around planting and cultivation. While some reported hearing news on the radio, others highlighted a lack of information about the forthcoming rainy season. Some are still planning on planting early in the hope that they are able to harvest before the flood waters return, suggesting that they do not view changes as part of a long-term trend which needs adapting to. Some suggested it was a punishment from God, including punishment for communal conflicts.

Local trends in Mali

Farmers in Mali reported receiving weather information (short-term rainfall forecasts) and this may have informed decisions about rice cultivation since a late start to the rainy season was said to have delayed planting, and, as a result, the rice was too small to resist rising floodwaters when they arrived. They did not mention receiving any information or early warning about the timing or height of floods in a particular year, nor about what the long-term trends might be.

Local trends in Somalia

While interviewees in Somalia are not faced with a dearth of weather or early warning information, they have such reduced coping capacity that they cannot take action in response to the information they have. Many of the study participants received their information through social media platforms on their cellphones. Some believed that some of the weather forecasts or information about the drought were being provided by an NGO, but were not sure which one. In any case, due to the repeated conflicts, the drought of 2016–17, the locust plague in 2020 and the current drought, the displaced have no assets left – crops have withered and livestock are dead – and their coping mechanism has been to move to urban areas. Some 40–50% of the interviewed IDPs were not planning on returning to agropastoral livelihoods; they intend on staying in the towns. People are taking on debt just to purchase daily meals, so having information is not helping them to 'anticipate' shocks and take action.

Key learning point 4

Gender-specific risks

Gender-specific risks are driving vulnerability. Our analysis shows that women across the case study sites are having to undertake both primary carer and provider roles, which can limit their ability to ensure there is enough food to eat. Structural conditions, such as the transfer of assets to husbands, dropping out of school due to entering marriage and the exclusion from community-based decision-making, create further vulnerabilities. Women also face a heightened risk of GBV both in IDP camps and when undertaking livelihood activities, such as travelling to and from farmland.

Local trends in Somalia

Women and girls who have been assaulted face high rates of social stigma. They are being denied casual labour opportunities, and/or are too afraid to leave home. Women outside of IDP camps reported having no access to medical and psychological support in the aftermath of attacks. Higher rates of domestic violence were also reported. Interviewees reported that many male IDPs are jobless and suffering despair; this hopelessness is erupting into violence at home. Women facing domestic violence reported being advised to remain with their husbands by community elders or leaders and given no recourse. Those women who have faced sexual violence are also rarely able to get justice.

Women at IDP camps (and, in some interviews, from host community households) indicated

that they are eating whatever food remains only after children and men have eaten. Women-headed households caring for children and/or disabled family members face the highest food insecurity burden, as they must balance child/disability care with finding work for the day to feed their children. Additionally, since most of a day's earnings are needed to purchase food, women reported being unable to afford to buy sanitary kits to meet their or their daughters' menstrual hygiene needs. A few men mentioned gendered food and nutrition security differences, noting that their wives have become weaker and suffer incidences of dizziness and fainting, but did not connect their wives' health status with women taking the lowest priority in household food consumption.

Local trends in South Sudan

A number of 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 can mean that women have limited time to search for food, restricting the distances they are able to travel. Searching for food can expose women to health risks. For example, in Thokchak, spending long days in the cold water collecting water lilies can lead to skin disease and illness. Debris in the water can also cause open wounds.

Cultural practices and structural conditions are contributing to the vulnerability of women. Young women report being seen as 'resources' by their family members, and being under pressure from family members to enter marriage in exchange for a dowry, which in turn means that they have to leave education. Early marriage was also described as putting young women at risk of miscarriage and other pregnancy-related health concerns.

Moreover, marriage does not always provide security for women. Under inheritance marriage law, women transfer assets (cattle) to their new husband. Female interviewees also reported on the practice of men having multiple wives, and feeling abandoned as their husbands focus on a new family and show little interest in providing for all their children. Men are migrating for work, leaving women to take care of the household. Sometimes their husbands send back remittances, but in other cases women reported receiving nothing and, having lost all contact with their husbands, not knowing whether they have died or found a new family. Widows reported being excluded from community-based decision-making, including on issues to do with flood defences and farming.

Women also reported cases of domestic violence linked to tensions over the current crisis, with some men accusing 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 stigma. Widows and female-headed households reported that they also risk being attacked and having their food aid stolen when they go to collect it.

Local trends in Mali

Women in Mali combine heavy domestic responsibilities with livelihood activities such as vegetable farming, weaving mats and petty trade. These activities generate income that, as several men recognised, is critical (even in good times) to ensuring there is something to eat each day – in particular, something nutritious in the sauce that

goes with the rice. As the ability of women to earn their own income is reduced by poor harvests as well as by the fear of attack outside the village, the quality of the household diet is directly affected by these elements.

Access to healthcare, particularly for pregnant women, is reduced when they are afraid to visit the clinic, when the clinic is closed at night, or when they must travel to another town for care.

Key learning point 5

Primary livelihood activities

Across the three countries, both conflict and climate shocks are preventing communities from practising their primary livelihood activities. Some undertake alternate livelihood activities as a coping mechanism, while others have found this difficult due to lack of education, cost (e.g. buying fishing equipment) and access to markets. In the longer term, education is seen as a means to pursuing alternative livelihoods and reducing household vulnerability. However, communities face difficulties in terms of access and affordability, with young people having to drop out of education to help support their families' immediate needs.

Local trends in Somalia

The majority of interviewees and focus group participants' primary immediate concern was the lack of permanent jobs, and their educational and skills deficiencies preventing them from applying for higher-paying jobs. But this is also a reflection of their longer-term livelihood goals. Many IDPs indicated that they do not wish to

return to agropastoralism or pastoralism; they are planning on settling in the towns to which they have fled. Both hosts and IDPs at the three sites asked for assistance with adult education and job skilling, as well as assistance with starting small businesses and savings groups. Most also want better education for their children so that they can take on more skilled jobs in the future. Few wanted to be receiving cash or food aid handouts. While grateful for these types of assistance, many of the interviewees are experiencing an erosion of dignity in not being able to provide for their households. They want to be able to stand on their own two feet.

Local trends in South Sudan

Interviewees expressed a desire for both equipment and training in supporting their primary livelihood activities within agriculture. Beyond this, education – or lack of – was highlighted as a major factor in preventing individuals being able to access alternative forms of livelihood. 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 alternate sources of income during the dry season. However, both young men and women said they have had to drop out of school. Young women have had to leave to support their mothers in collecting food for the household, or because they are under pressure to enter marriage. Young men have left education to find paid work, with some migrating to Sudan.

In addition to the lack of education, inadequate infrastructure and access to equipment are also hindering livelihood options. In Thokchak, being able to look for jobs in other villages was said to be restricted to those who had access to a canoe.

Flood waters could allow men to fish, but this depends on the individual having access to fishing equipment. Some of those who are able to catch enough stated that this can provide both food and, sometimes, a surplus they can sell. However, the lack of road infrastructure in Warrap – a common concern – causes difficulties for sellers to travel to markets and for buyers to come to them, creating barriers to trade. Elderly groups are at a particular disadvantage as they struggle to travel long distances to sell firewood.

Local trends in Mali

Participants in Mali have many ideas for improving resilience, ranging from support to develop and secure agricultural production through to raising the protective banks around the rice fields, bringing in water pumping, increasing access to fertiliser and seeds and training in more modern agricultural techniques. However, households also indicated a wish to diversify or expand their small businesses into (e.g.) livestock rearing, food processing and petty trade. They also want schools, so that their children can take more skilled jobs in regional towns and neighbouring countries and send back remittances.

Short-term needs

Recommendation 1: extend coverage of cash assistance

Data collection indicates that households across the three case study countries are either spending more (in some cases all) of their household income on food, or lack the financial means to purchase food at all. This situation is due to failed harvests which have resulted in a lack of produce on which households would normally depend to meet their daily needs, and/or a rise in the price of basic food items. Households

are responding to these rises through taking on more debt and selling assets, which erodes the household resource base and risks reinforcing their vulnerability to shocks. In cases where remittances are available, these can be difficult to access for those living in remote locations without access to a phone or bank account. We therefore recommend extending cash assistance in communities that form part of Action Against Hunger intervention sites.

The Action Against Hunger targeting guide for Somalia provides a set rate of cash transfer for unconditional cash assistance which is based on ‘transferring 80% of the combined minimum expenditure for populations classified ...[as] in [acute or emergency phases] and a review of market performance and commodity prices per region’ (Action Against Hunger Targeting Guide, n.d.). Such cash assistance is provided monthly, but follow-up interviews with the local humanitarian delivery partners will be necessary to understand how many are receiving cash payments, how often and for how long, and further criteria for selecting recipients at each site. (These interviews are scheduled as part of Theme 2.) We therefore recommend increasing both the number of recipients of unconditional cash transfers at all sites, and the assistance amounts, to account for inflation and the duration of assistance. One-off or three-month payments are not enough to bridge the gap of needs due to rising prices and the tightness of local labour markets.

Recommendation 2: increase community health screenings

Our analysis revealed that across the three country case study sites, households were reducing their daily meal intake and, in some cases, going days without eating. A common survival

strategy in response to food insecurity is for adults to reduce or go without meals for their children to have enough to eat. Data collection also revealed a lack of diversification within people’s diets; people are, at times, relying on foraging for wild plants with little nutritional value, such as water lilies in South Sudan. This suggests that there is a risk of malnutrition across the case study sites in all three countries. Bearing in mind that there was a lack of consistency in reports of household members being formally treated for malnutrition, widespread underdiagnosis is likely.

We therefore recommend considering regular community health screenings, including directly within IDP camps, going to those who need medical care and assessing them in their shelters. Transportation assistance via motorcycle, canoe or other appropriate mode could be provided to bring those in need of more serious care to a healthcare centre. Women’s and girls’ health needs, including menstrual hygiene, pre- and postnatal healthcare, and psychological support services for survivors of sexual assault and domestic abuse are critically needed. On community health screening days, food aid needs to be provided directly to all households being screened and treated, as these households will not be able to work to earn money for food on those days.

Recommendation 3: Implement vitamin and mineral supplementation programmes

A regular child and adult multiple micronutrient supplementation programme could be considered in order to reduce rates of a) malnutrition; b) childhood stunting that impacts cognitive development and, later, income-earning potential (Diwakar et al., 2019); and c) injuries and illness in adults that can inhibit working and worsen

household poverty. Providing legumes (such as cowpeas) as part of household food aid, in addition to RUTF for acutely malnourished children, can reduce protein and amino acid deficiencies across household members when eaten in combination with rice or sorghum (Herreman et al., 2020; Gwin et al., 2021). Addressing malnutrition is a critical step in moving from crisis towards supporting household and individual resilience. Those constantly malnourished are unable to learn or to work well, and are more prone to poverty outcomes, leaving them less able to cope with current shocks and stressors or prepare for the future (Diwakar et al., 2019). We therefore recommend expanding existing supplementation programmes.

This might require, however, reconsidering the eligibility requirements for food and nutrition supplementation programmes. Current interventions are focused on pregnant and lactating women, and severely malnourished children under the age of five. Study participants did not appear to be aware of the eligibility criteria or why only some can access food aid, including RUTF for children. They only saw others receiving aid while they themselves are turned away. If it is not possible to expand the programmes, clearer communication and awareness-raising by working with community leaders might go some way to reducing perceptions of injustice when people are turned away.

Moving from crisis management to resilience

Recommendation 4: provide spaces for women's voices and support women's empowerment

Evidence from our data collection underlines the importance of understanding gendered aspects of household vulnerability. Women are often the primary caregiver within the household, and responsible for ensuring the household has

enough food for the day. This role is complicated if female heads of households are caring for young children or disabled family members, restricting their ability to travel to collect food. Women are also at heightened risk of gender-based violence in IDP camps, in their homes, when working fields and collecting food aid. It is very difficult for women to discuss GBV and receive adequate support. Those in domestic abuse situations reported being told by elders or community leaders to stay in their marriage – though two women in Somalia had found the courage to leave their husbands. However, they have been shunned by the community, as are women who have been raped, which makes it very difficult to provide for their children. These households are at particular risk of food insecurity and malnutrition. Women who have recently been widowed also reported lacking influence in community discussions on the distribution of aid within the community. Changing cultures around the challenges women face, and women's agency and empowerment, will take years and must be left to the communities. However, women did voice some of their particular challenges, and they want (in Somalia) to find ways of addressing them. As a start, we recommend providing spaces in which they feel safe to express their specific concerns related to community decision-making impacting food and livelihood security, especially where these decisions affect or contribute to the vulnerabilities of women.

Recommendation 5: education for both children and adults, job skilling and diversification programmes

We recommend considering ways in which humanitarian action can support livelihoods in the short term, and how it can complement development or community-led programmes that aim to support the livelihood and economic diversification that are needed to truly build resilience in the longer term. While it may be beyond the mandate of humanitarian

interventions to address more than immediate needs, supporting food and nutrition security resilience requires longer-term interventions. In the short term, interventions like community gardens or Cash-for-Work (CfW) can provide additional sources of food and income that can support short-term community resilience. However, this support needs to take care not to saturate the local market, which can lead to increased competition and a fall in what households are able to earn. Where possible, CfW interventions should aim to diversify the non-farm work options available to households.

Finding ways to support farming and livestock to adapt to climate change should be a key focus of livelihood programming. Humanitarian programmes are unlikely to be able to significantly support the building of resilience, due to lack of mandate. To support resilience in food and nutrition security, humanitarian interventions need to cooperate (or at least coordinate) with development programmes and interventions. This could include supporting adult/youth education/skills training – an area raised by interviewees – aimed at improving production, reducing post-harvest losses, and improving natural resource management. Such support may go beyond the mandate of a humanitarian organisation, but Action Against Hunger can consider how, in partnering with other organisations, it can be part of a wider change. In practice this could mean helping communities advocate for the support and investment they require, or partnering with organisations which have expertise in these areas. Part of Action Against Hunger’s role could be to identify local NGOs or government technical services with which to partner.

Climate projections are indicating that the frequency and intensity of floods, droughts and heat waves will increase for the three study countries (IPCC, 2022). Discussion around climate change needs to be included within educational programmes around job skilling and

diversification, and consideration of what kinds of livelihoods are promoted. It might not make sense to promote a return to agriculture or pastoralism in the face of climate change, shifts in water security and increasing fluctuations in global markets and prices. Furthermore, household and community resilience can be strengthened through livelihood diversification; this requires job skilling for adults and education opportunities for children.

Recommendation 6: Support early warning and early action systems/ forecasting and anticipation

We recommend identifying what early warning and early action systems currently exist in Action Against Hunger intervention sites, and finding ways either to improve or support existing systems, or support the development of new systems. Our analysis shows the coverage of Action Against Hunger sites is not universal, with some communities making planting and harvesting decisions based on limited information and little sense of the long-term trends which create future risk. Therefore, having such systems in place could play a role in reducing the need for humanitarian assistance. However, an effective intervention requires not only making such early warning systems available; it also needs to ensure that information is communicated in a format people understand and is relevant to the decisions they are taking – and, most importantly, that they are able to act on the information. These are the classic challenges of weather and climate services, including early warning, which have been researched for decades (Opitz-Stapleton et al., 2022). Often, it is not the access to weather or climate information itself that is an issue, but the context of limited livelihood protection/diversification options that makes it difficult or impossible for households to take early action at all.

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Annex

Methodology

We used a mixed qualitative approach, contextualising key informant interviews (KIIs) and focus groups (FGs) with survey data collected previously by ODI and a political economy analysis of each context. As this work is centred around narratives, approximately 6 FGs and 15 KIIs per village/settlement/community allowed for a rich picture to be built around people's experiences. Verbal consent was sought for both KIIs and FG participants, and some consented to be recorded. Responses are anonymised, in keeping with ODI's Ethics Policy.

Time and resource constraints for this project required us to limit the assessments to a maximum of three villages per country. To ensure we gained important comparative insights, our sampling criteria were designed to capture a diverse cross-section of households from each site. The sites also had to have active Action Against Hunger programmes and have been previously selected using targeting criteria similar to that outlined in Action Against Hunger Food Security and Livelihoods Sector Targeting Criteria and Approaches. Additional sampling criteria for our research (building upon Action Against Hunger other criteria) included:

Livelihood profiles: We sought to choose participants who were all engaged in primary livelihood activities that were pastoral, agropastoral or agricultural in nature, but also included those who practise mixed livelihood activities. The extent to which our participants practised these three different types of livelihood activities varied depending on the site, as well as gender. We also examined livelihood diversification strategies and seasonality.

Gender and ability: We aimed to achieve as close as possible to a 50/50 balance in male and female participants, of a range of age groups. Ethics considerations and permissions mean we could not interview people below the age of legal adulthood.

Resilience data: Resilience is a process, not an endpoint. To look for trends in how households are changing their behaviours and coping strategies in response to repeat shocks and stressors, we engaged in communities where Action Against Hunger ideally has at least two (preferably more) years of data on nutrition, household incomes, access to WASH, livelihoods, mobility, etc.

Conflict intensity: The safety of the research team is paramount; therefore we were unable to send individuals to areas where there are high levels of violence or which are inaccessible due to the activity of armed groups.

Physical access: We pre-assessed the suitability of interview sites that presented difficulties in terms of physical access due to factors such as conflict or lack of transport options.

Semi-structured in-depth interviews (KIIs): The main focus of this first phase was the in-depth interviews, with 15–18 participants in each community. These interviews were semi-structured in nature and allowed the local researchers and enumerators to probe and expand flexibly in response to what participants were sharing.

FGDs: FGDs were used to explore specific topics in more detail with specific respondent groups. The rationales for and opportunities and constraints faced when using coping mechanisms are different for women compared with men, for those with disability and for youths (ages 18–25). It was important that youths be separated out from older participants for the FGs due to seniority issues – with older community members present, younger ones will not speak, out of deference. There were three focus groups for women (youths, those above the age of 25, those with disability or caring for a family member with disability or women-headed households) and three for men (youths, those above the age of 25, and those with disability or caring for a family member with disability). The goal of speaking with unmarried women and men was to capture some of the youth voices. This was particularly important given that existing evidence shows that young people are more likely to move in response to climate-related shocks, and that women are more likely to face barriers to migration and to be ‘trapped’ in the face of climate-related changes (Selby and Daoust, 2021).

Photo survey: Principal Country experts and local enumerators were also asked to conduct a basic photo survey of water points, vegetation (crop, fodder and wild food), and livestock conditions to provide visual context to the narratives.

Interview Guide

Verbal Consent Script

My name is _____ and I am a researcher with ODI. We are conducting interviews about what kinds of challenges people here are facing in their lives, and how they're dealing with them. The interviews will help to provide evidence to an international humanitarian organisation.

The interview will take approximately 60 minutes/1 hour.

This research and the interviews have nothing to do with the government or the relief you get. We will never share or publish your name outside of our study team if you choose to participate in this research. We will only share the overall findings from this project with other organisations.

You can decide at any time to end this interview. If at any time we ask you a question that you don't want to answer, we can skip that question.

Do you agree to proceed with this interview?

If yes to the interview:

Great, thanks! We can get started now. I would also request for your permission to record the interview. Is this ok? If not, this is not a problem.

If no to the interview:

Ok, no problem. I understand. Thank you for your time. [END INTERVIEW]

Interviewer and Respondent Details

Interviewer Name:

Respondent Name:

Sex: Female or Male

Age:

Respondent Phone:

Occupation (Farmer, Pastoralist, Agro-past, etc.):

Date of interview:

Location of interview (be specific!):

Start time:

End time:

Other notes about interview (do check and note here
if the interviewee is an IDP):

1. Could you tell me a bit about yourself:

- Did you have to move to this location? What brought you here to this location? How long have you been here?
- What is your main source of income?
- Did you have another main source of income before this year? (*Probe: If they say yes, ask them to elaborate what job?*) What happened that you had to change? (*Probe: if they do different jobs in different seasons, such as dairy trading if women and this during the rainy season. Want them to tell us what they are doing now – if they are IDPs – versus what they did in the past. Try to dig deeper and find out if they are a returnee, IDP or a host*)

2. Could you tell me about how many people you have in your household who are currently eating from the same pot?

- What are the ages of people living in your household?
- What are their relationships to you?
- Do any of these people have disabilities? Any pregnant women? Anyone with special medical care needs?
- Are they from this village? If not, why did they move here? Is their move permanent? (*Probe around if any moved for marriage or fostering children*)
- Are any of these who moved to your household Internally Displaced Persons?
- How many of the people who are in your household have jobs which generate an income for the household? What types of jobs? (*For point of clarification, the reference to job is those which generate an income for the household. Do probe around if children are working as well*)
- For interviewees that that are IDPs — Are all family members here – at this IDP camp

(if interviewing at a camp) or village (some IDPs end up in new villages or towns), or have some remained at your previous home? (*Probe for what reasons they remained behind – looking after animals, engaged in farming activities, etc.*)

- How many people who are in your household wish they had jobs, but aren't currently working? Why are they unable to work?
- How many people in your household moved to different places to find jobs in the past year? If so, where did they move? What kinds of jobs are they doing there?
- Is there anyone sending your household remittances?
- How does your household receive this remittance? (*Probe around if it's coming via mobile phone, bank – how do they get it. Ask about which digital platform. If coming through an intermediary. Do the remittances come only to the men of the household or do women receive them?*)
- How often?
- Who are these people sending your household remittances?
- What do you do with the remittance you get? Is it sufficient to support your household through hard times or lean season, etc.?

3. How many meals a day does everyone in your household eat?

(*Probe around what they are currently eating for breakfast, lunch, dinner*)

- What are the sources of food for your household? (*Probe around how much of it the household grows itself, how much it purchases from markets or shops, forages from the wild or got from an aid organisation*)
- What kinds of foods are people in your household eating? Why these foods? How have the types of food changed within the last 12 months? (*If they mention changes, ask them why they have changed what they're eating*)

- Are people in your household eating more meals a day or less than last year? *(Ask them to explain the response)*
- Is everyone in your household able to get enough food every day? Are there some household members who eat less than others? Why?
- Are you eating the types of food you want to eat? *(If yes or no – ask why? Probe in either case if the types of food they are eating now are more or less diverse than in past)*
- What percentage of your income do you spend on food? Has this amount increased or decreased in the last 12 months? What else do you have to do to get food? *(Probe around the selling of assets, relying on help from friends and relatives)*
- Do your children have to work? How does their employment help your household?
- Have you or any member of your household been diagnosed as malnourished in the last 12 months? By whom? If so, has your/their health status changed since then (e.g. improved, worsened?)
- If they mentioned in Q2 that they have an elderly, disabled, or sick HH member – How are the sick/disabled/elderly or pregnant women impacted?
- How does the situation you are concerned about impact your family's food and nutrition situation?
- How does your household try to manage this main concern?
- Who in the household does what to manage the concern? *(Probe around family members migrating, refer back to previous question. Are children taking on jobs and dropping out of school, girls getting married at an early age, etc. What kinds of activities are they taking on?)*
- Do you get help from others beyond your household in managing this concern? What are these other main sources of help? What help do they provide? *(Probe: if these are established local/national/international organisations, what are the reporting procedures?)*
- When there are challenges that your community faces, how do they work together to overcome these challenges? How do people support each other in hard times?

4. What is your biggest concern for the moment?

(Probe: if it's related to conflict or security, family dynamics such as death or a sick or wounded family member, and need to find out how it's impacting. Who are the people causing the conflict? What is the conflict about? If it's related to seasonal hazards like floods, or drought -> need to probe around impacts such as lost crops or pasture for livestock, damage to houses or assets. Rising prices -> food, fuel, fertiliser, etc.)

- Why? How does this impact you?
- How are the women in your household impacted by this biggest concern? The girls?
- What about the men? The boys?

5. Is your household affected by conflict in this area?

(This question is a follow-up to Q4 in case the interviewee doesn't mention conflict. If the interviewee answers yes, probe using the following questions)

- What is the conflict about? Who is involved?
- How does this conflict impact your income-generating activities? Your property?
- Do you feel safe when you try to go to places like markets, health centres, school, fetch firewood/water, grazing animals, or going into the fields to farm? *(Or moving about the camp?)* *(If in an IDP camp)*
- How are the women in your household impacted by this conflict? The girls? How safe do they feel going about their lives here?

- What about the men? The boys? How safe do they feel going on with their lives and carrying out their daily activities?
- How does this conflict impact the kinds of food, and amount, available to people in your household? Your ability produce food for your household? Are any of the previous coping strategies you mentioned as a result of this?

6. If they don't mention any climate concerns in Q4, follow-up with: Of the following – flooding, drought, heat wave, people cutting down trees and branches for fodder and energy – which have been the most concerning to your HH in the past 12 months?

- How does this/these impact your income-generating activities? Your property?
- How are the women in your household impacted by this type of weather event? The girls?
- What about the men? The boys?
- How do these events impact what kinds of food are available to people in your household? To produce food for your HH?
- What kinds of steps does your household take to prepare for and deal with flood/ drought/ locust plague/ etc?
- Are any of the previous coping strategies that you referred to a direct result of these impacts?
- What kinds of community actions are taken to manage flood/ drought/ locust plagues/ cutting down trees or bush for fodder?
- Do you receive any information regarding droughts or floods? (If they say yes, probe further) Who has said what? What have the elders said about rains? Have you heard anything on the radio? Or on your cellphone? Which of these sources of weather information do you pay most attention to? Why? How do you use this information to plan?
- Do you receive any form of external assistance during these types of events? (Probe: If so, from who? And what type of assistance?)

7. Is your household receiving any aid from any external assistance from outside your household or community? If so, what kinds? Who from? How often? Could you describe how they consulted with your household on what aid you needed?

- How long does this aid last your household?
- Are you happy with the aid that your household is receiving? Why?
- What type of aid would you actually prefer to receive? Why? (The food preference can actually reflect the social status of what they prefer to be seen as belonging to. It's also likely to prompt people to tell us what they are doing with the food aid if given it)
- What would be the most important kind of assistance that could help your family over the next six months?
- Did anyone help you get this external assistance? What was their role in helping you get this aid?
- What kind of arrangements do you have with them for getting this aid?

8. In terms of the concerns you have raised and how these impact your ability to access and produce food:

- Do you feel you are you able to prepare for these challenges as a household/community?
- How do you foresee your food and nutrition situation changing in the coming months? What are you planning to do to maintain or improve it?
- What is it that your household/community would like to do but are unable and need support with?

Do you have any other thoughts or concerns you would like to share with me and ODI?

Thank them for their time.

Focus Group Discussion Guide

- What are some the issues that are of the most concern to people in this village? Why are these most concerning? How does this/these concern(s) relate to accessing and producing food?
- How has people's ability in this village/town to access and produce food changed in the last 12 months? Or nutritional status? What has changed to make it better or worse?
- What coping mechanism are people in this village/town using around getting food? (*Allow respondents to first provide examples. Then use the following examples in case respondents are not forthcoming:*)
 - Relied on less preferred, less expensive food
 - Borrowed food or relied on help from friends or relatives
 - Reduced the number of meals eaten per day
 - Reduced portion size of meals
 - Reduction in the quantities consumed by adults/mothers for young children
- What other things do people do in terms of coping that aren't on this list?
 - (*Probe around which one of the strategies seems to be the most common*) Which of these is the most common that people use? Are all households adopting one or more of these strategies? Is it just the poorest? What times of the year most likely to be using these? What about when there is a crisis?
- As a community, what types of conflict have impacted people in this area?
- How does conflict impact your community's ability to access or produce food?
- Who are most affected by the conflict situations in this community? Women, elderly, girls, men and youth? How are they affected, their lives and activities?
- Do the community members feel safe when they go out to the market, health centres, graze animals, to the garden, etc.? Why?
- What does the community try to do to deal with the problem of insecurity in the area?
- Do people in this community get help from others? If so – what kinds and from whom? Govt, NGOs, UN?
- Which of these weather hazards – floods, droughts, heat wave, changes in the rainy seasons, locust plagues – seem to be happening a lot in this area in the past few years?
- What kinds of impacts does this event(s) have on people's livelihoods? Which of these events contribute the most to people having to move? How does XX (the hazards they mention) impact people's ability to grow or access food?
- Who are most affected by the event? Women, elderly, girls, men, those with disability and youth? How are they affected, their lives and activities?
- What is the community doing to manage the impacts of this type of event? Does the community get help from others to help manage flooding (drought, other)? From whom? (Inquire about government, NGOs, UN) What types of help? What steps do you think can be taken by the community to better protect itself against XX (flooding, drought, etc) in the future?
- What would be the most useful things for people like you in this community in terms of improving:
 - Your production of food?
 - Your access to food?
 - What assistance would you like to have? How would it help you with these challenges?



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