



Summary Note

UNDERSTANDING COMPOUND EVENTS IN FRAGILE CONTEXTS

Insights from Ethiopia & Kenya

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Summary Note

Interactions between natural, socioeconomic and political threats can lead to compound crises where the cumulative impacts are far larger than the sum of individual threats. The implications of compound crises can severely undermine development gains by hindering progress towards poverty reduction shared prosperity. These impacts are particularly pronounced in contexts affected by Fragility, Conflict and Violence (FCV), which serves to limit coping capacities of affected communities and amplify vulnerabilities to future compound threats. In turn, impacts and responses to given disasters can exacerbate underlying conditions related to FCV, further increasing long-term exposure to compound risk.

The Horn of Africa is especially prone to compound crises. Many parts of the region are characterised by high levels of institutional fragility, socio-economic vulnerability and food insecurity amongst other drivers of risk. Limited national and regional capacity to support cross-sectoral risk management means that many countries are highly exposed to successive threats with spill-overs that spread across multiple sectors. In addition, the impacts of climate change are likely to hit the Horn of Africa especially hard through increased climate variability and rising temperatures, with knock-on implications for wider political, social, economic and demographic challenges.

Many governments across the Horn of Africa, and elsewhere, struggle to address the drivers of compound risk. Risk management activities are heavily focused on monitoring and addressing singular threats, with little attention paid to supporting cross-sectoral coordination and response. Limited national resources and technical capacity needed to support holistic risk management make the task of managing compound risk especially challenging. Understanding root causes of compound crises is an important first step in supporting governments' ability to promote risk reduction and crisis preparedness across the Horn of Africa. Despite this need, little is known about how different types of risk interact and what windows of opportunity exist in preventing compound crises from materializing, particularly in FCV contexts.

To address key knowledge gaps related to compound risk, this report documents findings from a retrospective analysis of two compound crises in the Horn of Africa. The linked crises occurred in Kenya and Ethiopia between the end of 2016 and the beginning of 2018, when a severe drought was immediately followed by extensive flooding during the long rainy season (see Figures ES1 and ES2). The situation was further compounded by spillovers and interactions with wider dynamics including ethnic conflict, political disruption, displacement and crop pest infestation, with severe implications for livelihoods and wellbeing.

FIGURE ES1: Disaster events timeline in Ethiopia from January 2017 to July 2018

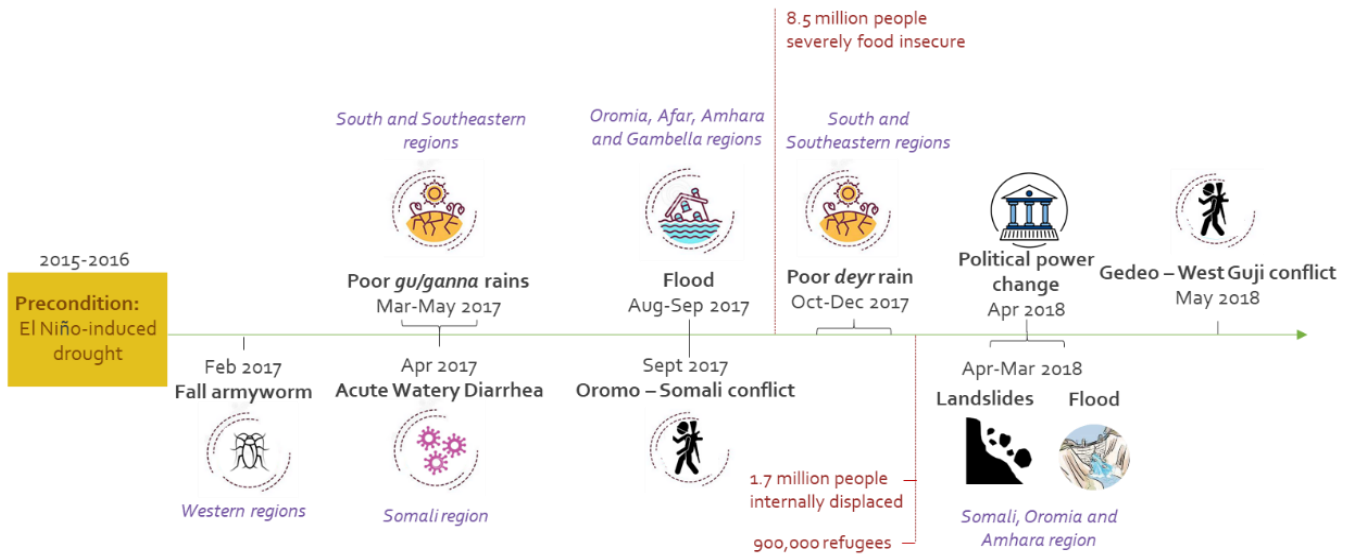
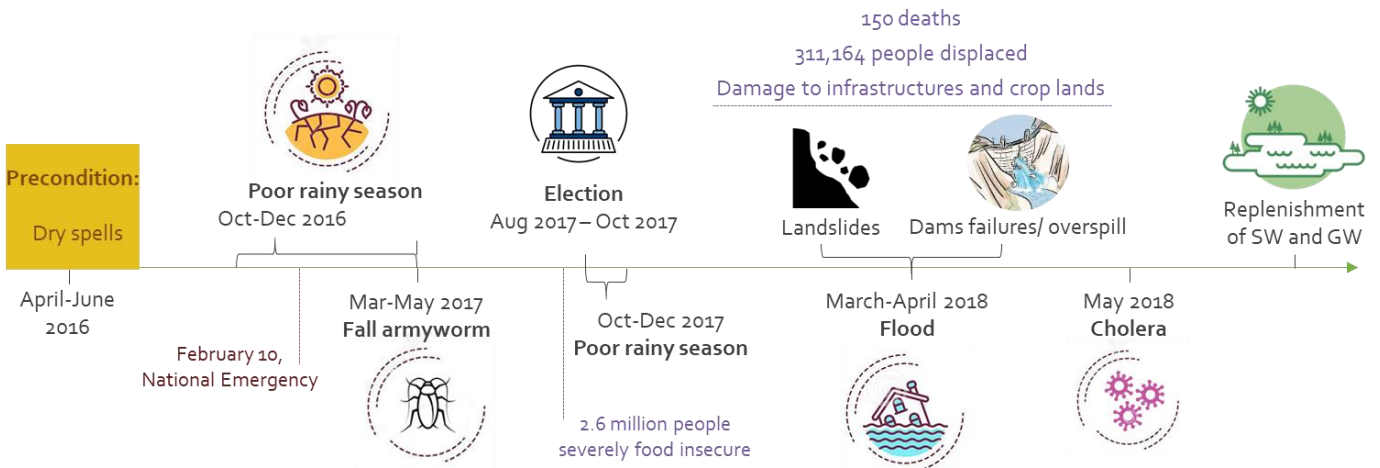


FIGURE ES2. Disaster events timeline in Kenya from April 2016 to July 2018



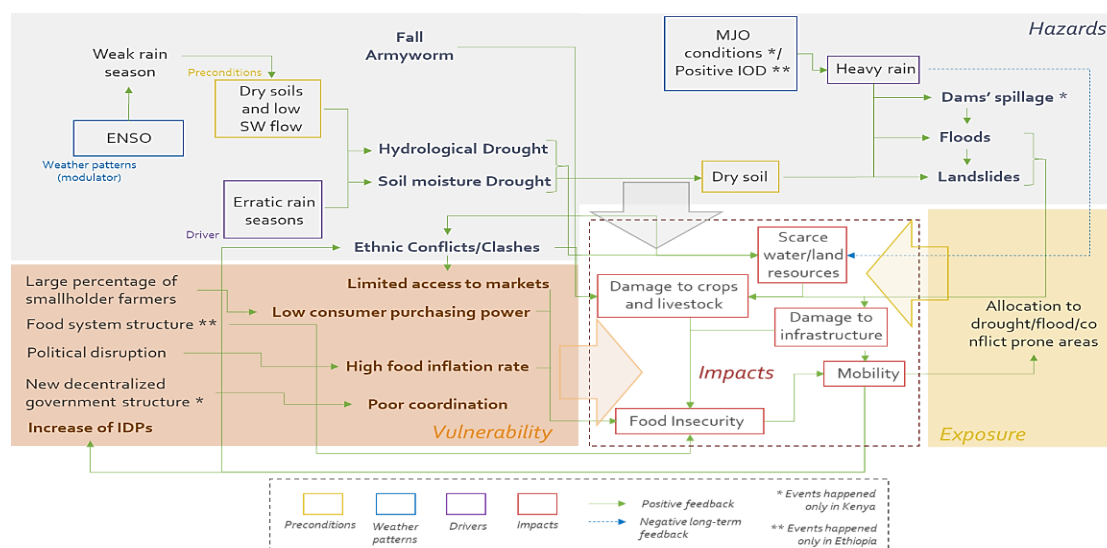
A series of qualitative and quantitative methods are used to explore the interaction of various threats and outcomes from the two crises. More specifically, the work seeks to understand the drivers of compound risk and how they materialize over time, as well as identifying relevant windows of opportunity that can support early action based on the two case studies.

Key Findings

A summary of key findings from the retrospective case study are presented below.

- The 2017-2018 compound crises in Ethiopia and Kenya resulted from interactions between successive multi-sectoral threats, exacerbated by conditions related to FCV.** These had considerable knock-on implications for wider drivers of risk and outcomes that included displacement, increased food insecurity, inter-ethnic tension, and health-related concerns in both countries. A strong contributing factor to the crises was past exposure to slow-onset regional climate extremes coupled with high levels of socio-economic vulnerability that materialized in the years prior. Political disruptions, institutional fragility and conflict in both Kenya and Ethiopia further escalated exposure to compound risk, laying the groundwork for the crises that ensued shortly after.
- Communities affected by different types of threats were hardest hit.** For example, those that experienced the highest levels of food insecurity weren't necessarily those exposed to the highest levels of rainfall. Instead, communities simultaneously affected by conflict and other wider threats were consistently revealed to have the worst food-related outcomes. This occurred due to the interaction of consecutive weak rainy seasons with structural poverty, political marginalization, and conflict severely limited coping strategies adopted by affected communities. In other cases, quick succession between hazards had severe consequences. In Ethiopia, rather than offering reprieve from a long drought, the arrival of rains shortly after the drought increased the risks of flash flooding and landslides in the immediate-term due to the dry and compacted nature of the soil. However, rains did lead to replenishment of water sources and amelioration of food security conditions in the longer-term.
- Compound crises have many direct and indirect causes and feedback loops.** A glimpse of the complexity of the case studies examined as part of this research can be seen in Figure ES3. The Figure presents an analytical risk framework summarizing the primary hazards, exposure, vulnerabilities and impacts related to the compound events that took place in Ethiopia and Kenya.

FIGURE ES3. Summary of key drivers and impacts of compound events studied in Ethiopia and Kenya¹



¹ The framework was developed by combining the risk framework proposed by GAR21 - (Reisinger *et al.* 2020) and by (United Nations Climate Change, 2020)

- Findings reveal the non-linear nature of responses and causality between compounding threats.** The diversity of interactions associated with compound risk mean that the impacts of a given sectoral shock can result in deteriorating conditions in another sector, which can in-turn feed-back and cause worsening conditions across both sectors. For example, the report documents numerous cases where food security threats (driven by natural hazards) served to aggravate existing FCV tensions, which in turn heightened communities' sensitivity to future food insecurity – either as a result of climate extremes or worsening conditions related to conflict and fragility.
- Impacts are also spatially and temporally heterogenous.** This makes it difficult to identify singular policy responses. Caution should be taken in efforts to prescribe simple policy responses that fail to disentangle the complexity of causal loops in the context of compound crises. It is also important to ensure that policy responses are context-specific, recognizing that similar threats (such as flooding or drought) can illicit different impacts and coping mechanisms depending on the area of concern.
- Coping mechanisms for one hazard can inadvertently increase vulnerability and exposure to others, especially in the absence of alternatives.** Several strategies adopted by studied communities in both countries served to increase exposure to wider compounding threats. For example, disaster-induced migration was one of the primary coping mechanisms adopted by affected communities, particularly in rural eastern and southern communities of Ethiopia. While this provided temporary reprieve, migration served to further exacerbated existing tensions between pastoralists and sedentary groups, aggravating resource-based conflict and inter-communal competition over land as well as increasing exposure to other subsequent threats. Escalating violence in the aftermath of the crisis resulted in restricted access of humanitarian aid in both countries, further exacerbating the impacts of ongoing drought. In Kenya, incidence of consecutive flood and drought events pushed pastoralists to seek pasture and livelihoods in other communities, increasing the likelihood of rustling and confrontation with farmers results with a clear rise in violent conflict.
- Policy responses to individual sectoral threats both reduced and heightened exposure to future compound risk.** In both cases, response measures that addressed individual hazards often heightened risk to other subsequent shocks. For example, redirection of government resources to address one threat often meant that core delivery of core services in another sector was threatened. In other areas, targeted interventions to respond to a given hazard (e.g. swift application of pesticides to combat threat of crop pests) had detrimental outcomes on livelihoods (e.g. ill-considered choice of pesticide harmed livestock) with knock-on implications for people's capacity to cope with subsequent sectoral threats.
- Compound risks are likely to increase in coming years and decades, exacerbated by heightened vulnerability to climate change across the Horn of Africa.** In particular, gaps between successive flood and drought events have shortened dramatically. Communities affected by drought are now more likely to experience subsequent extremes (including flooding) before they have time to fully recover. This has major impacts on smallholder farmers and pastoralists whose coping strategies are severely weakened by consecutive or compounding shocks. Vulnerability to climate-related impacts will be especially pronounced in areas affected by FCV owing to low levels of adaptive capacity.

Implications for policy

Findings from the study have several implications for stakeholders seeking to reduce exposure to compound risk, in Kenya and Ethiopia as well as elsewhere.

- **Responding early is key to limiting future impacts related to compound crises.** Slow policy responses in both Kenya and Ethiopia resulted in the impacts spilling over across other sectors. Acting early to address emerging threats and reducing underlying levels of vulnerability can play a significant role in lowering the risk of future compound crises. In both case studies, early windows of opportunity were evident though uptake was slow and remained limited within single sectors. For example, while seasonal and weather forecasts were issued well in advance of the initial triggers (drought events linked to El Nino), response activities were ill-coordinated and remained solely focused on the agricultural sector.
- **Cross-sectoral coordination is needed in reducing the impacts of compound crises.** Compound events do not hit all sectors in the same way and at the same time. Cross-sectoral coordination is needed in helping to communicate the emergence of initial threats and reduce the likelihood of impacts from one sectoral hazard spilling over across other related sectors. This includes coordination across spatial scales (e.g. between national and local government), across sectors (e.g. between relevant ministries and agencies), and across relevant stakeholders (e.g. between government, multi-lateral agencies, NGOs etc.).
- **Strengthen the capacity to respond to compound risk at local, national and regional scales.** Findings from the research demonstrate how considerable spatial diversity of economic, social and environmental traits in Ethiopia and Kenya results in differing levels of vulnerability across scales. Given that the focus of risk management activities is heavily oriented towards national-level coordination, greater attention is needed in tailoring and supporting local-level responses. In particular, while dedicated (though meagre) financial and technical resources are allocated to nationally mandated bodies to coordinate national risk preparedness and response, the capacity of sub-national government is especially lacking. Considerable attention is needed in supporting sub-national governments in developing and implementing local prevention, preparedness and response plans as well as increasing their capacity to monitor localised risks. Plans should be tailored to recognise the diversity of socio-economic conditions and climate-related vulnerabilities in different regions of the country. In addition, the case studies demonstrate how compound threats can spill-over across national borders. This includes risks related to cross-border migration, macro-economic dynamics and disease outbreaks amongst others. Such properties underline the importance of regional planning and coordination of risk management between countries across the Horn of Africa, including strengthening of dedicated regional bodies such as the Intergovernmental Authority on Development (IGAD) and regional risk management commitments like IGAD's Drought Disaster Resilience and Sustainability Initiative (IDDRSI).
- **Ensuring risk management strategies are conflict sensitive.** Numerous examples of how coping and response strategies exacerbated conditions related to FCV are provided throughout the report. In particular, disaster-induced migration was used as an immediate means of coping with both natural hazards and conflict in Ethiopia led to increases in ethnic tension that in-turn heightened levels of displacement and provided barriers to humanitarian access. Plans and policies aimed at reducing compound risk must factor in medium- and long-term implications on underlying drivers of FCV. With that in mind, strategies aimed at responding to compound crises should be conflict-sensitive and ensure that careful consideration is given to potential knock-on impacts on social cohesion, violence

and discrimination of marginalised groups. This includes options to develop dedicated plans to manage and coordinate climate- and disaster-induced displacement.

- **Investing in early warning systems can support early action and reduce the risk of compound threats from materialising.** Early warning systems are crucial in providing timely windows of opportunity to support preparedness and response activities. In order to be effective, warnings need to be linked to outreach and communication activities as well as decision-making processes as part of effective early warning systems. Efforts also need to be made to promote multi-sectoral systems – ones that incorporate forward-looking information across a range of sectoral threats.
- **Compound crises have multiple windows of opportunity to support effective response.** As shown by the findings from this analysis, compound events are convoluted with multiple drivers, spillovers and impacts. While designing dedicated response activities is a challenge, it is possible to identify three main windows of opportunity that can guide effective risk management activities.

i. Prior to the onset of a compound crisis:

This time window provides opportunities to address structural issues and implement long-term risk reduction measures. Such activities relate to efforts to reduce future vulnerability and exposure of key hazards. This includes measures to tackle underlying causes of vulnerability such as poverty reduction strategies, social protection systems of resilience-building activities. The window is also a valuable opportunity to promote crisis preparedness measures at national and local levels. Supporting such measures can not only reduce the risk of a given hazard resulting in a disaster event, doing so also significantly reduces compound risk as a result of knock-impacts that can ensue from the initial trigger event.

ii. Immediately after a hazard is forecasted:

- Forecasts and real-time early warning systems provide valuable windows to support preparedness and response activities. The ability to provide accurate forecasts (and the length of advertised warnings) will differ depending on the type of hazard. In the case of climate variability, seasonal forecasts can provide meaningful warnings regarding conditions of above or below average rainfall to national and local decision makers up to 3-month in advance. Weather forecasts can also provide information about the likelihood of extreme weather events, with actionable accuracy up to 10 days and beyond. While these timeframes do not typically allow risk prevention, they can support decision makers in promoting preparedness and response activities days and months in advance of trigger events.

iii. Shortly after the start of one or more trigger events:

- Under this window, options are severely limited as the initial trigger event(s) has already started. However, responding immediately after an early hazard (one that has the potential to develop into a compounding event) can help to significantly reduce the risk of spill overs cascading across sectors – factors that often lead to complex crises given the exponential nature of their development.
- **Prioritising livelihood diversification in FCV contexts where people usually depend on one source of livelihood.** One of the main reasons for adopting adverse coping strategies like disaster-induced migration as part of the study was a lack of alternative sources of livelihood. In particular, strong dependence on rainfed agro-pastoral activities meant that many people were left with little alternative but to migrate – further exacerbated ethnic tensions and increasing vulnerability to future threats in the longer-term. Livelihood diversification can assist households to insulate themselves

from environmental and economic shocks, trends and seasonality – in effect, to be less vulnerable. This should be a focus of interventions from government and development stakeholders, including integration with national and local disaster risk reduction strategies.

- **Enhancing crisis preparedness is key.** One of the most important measures for reducing compound risk is active support for crisis preparedness. This includes ex-ante interventions to: strengthen legal and institutional foundations for preparedness; monitor past, ongoing and future risks put in place adequate risk financing mechanisms; support primary response measures, including critical infrastructure and public health services; and strengthening food and livelihood support systems. Preparedness measures that support greater cross-sectoral coordination are especially key in preventing threats from materialising into compound crises.

