

## Weathering the storm:

### Findings and recommendations from a study of crisis-attributable deaths in Somalia

#### Summary

- Climate- and conflict-driven emergencies continue to drive increased death tolls in Somalia.
- We conducted a statistical analysis of the most recent drought-triggered crisis in 2017-2018, and estimated approximately 45,000 crisis-attributable deaths.
- While the estimated death toll is lower than during the 2010-2012 famine, it remains staggering. Increased mortality affected most of Somalia, including central and north-eastern regions.

Hygiene and Tropical Medicine (LSHTM) and Johns Hopkins University, and commissioned by the United Nations, estimated that this crisis claimed some 256,000 deaths. Roughly half of these deaths were in children under the age of 5. The majority occurred in southern Somalia, particularly among internally displaced persons (IDP). More than 1 in 10 IDP children living in Bakool, Banadir, Bay, Lower Shabelle and Middle Juba, and some 1 in 5 in Bakool and Banadir are estimated to have died during the crisis period.

#### The latest drought-triggered crisis

In 2016, another extended cycle of poor seasonal rainfall, against a backdrop of ongoing conflict, returned many parts of Somalia to acute food insecurity. During 2017-2018, large-scale population movements, as well as widespread outbreaks of cholera and measles, added complexity to an already precarious situation. These factors were compounded by cyclones and resultant floods, bringing the total number of IDPs to 2.6 million at the end of 2018, with millions more in need of humanitarian aid. During this latest crisis, central and north-east Somalia (Puntland) were heavily affected.

## Crisis-attributable deaths in Somalia

### A history of crises

Somalia has experienced recurrent climate and armed conflict-driven crises over the past three decades. The frequent nature and scale of these crises have weakened the Somali population's ability to withstand shocks and increased their vulnerability to their health impacts.

In 2010-2012, as a result of successive seasons of failed rains and severely limited access to humanitarian aid for the most vulnerable populations, extreme food insecurity and famine conditions occurred across south-central Somalia. A study conducted in 2013 by the London School of

### What was the mortality toll?

We have updated our 2013 analysis of mortality in Somalia, focussing on deaths attributable to the drought-triggered crisis in 2017-2018. In comparison with the 2010-2012 famine, our analysis indicates fewer crisis-attributable deaths (about 45,000,

compared to 256,000). Death rates also appeared lower amongst children under 5 years as compared to the previous crisis.

Nevertheless, the overall estimates of crisis-induced deaths for 2017-2018 remain staggering, indicating considerable unmet needs in the response. Furthermore, death

rates appeared to increase across central and northern Somalia, and not just in the southern regions (see Figure). Even during relatively favourable periods (2014-2016), the crude death rate across Somalia remained around 0.35-0.40 per 10,000 people per day, more than twice the level in nearby countries with a similar age structure (Kenya, Tanzania).

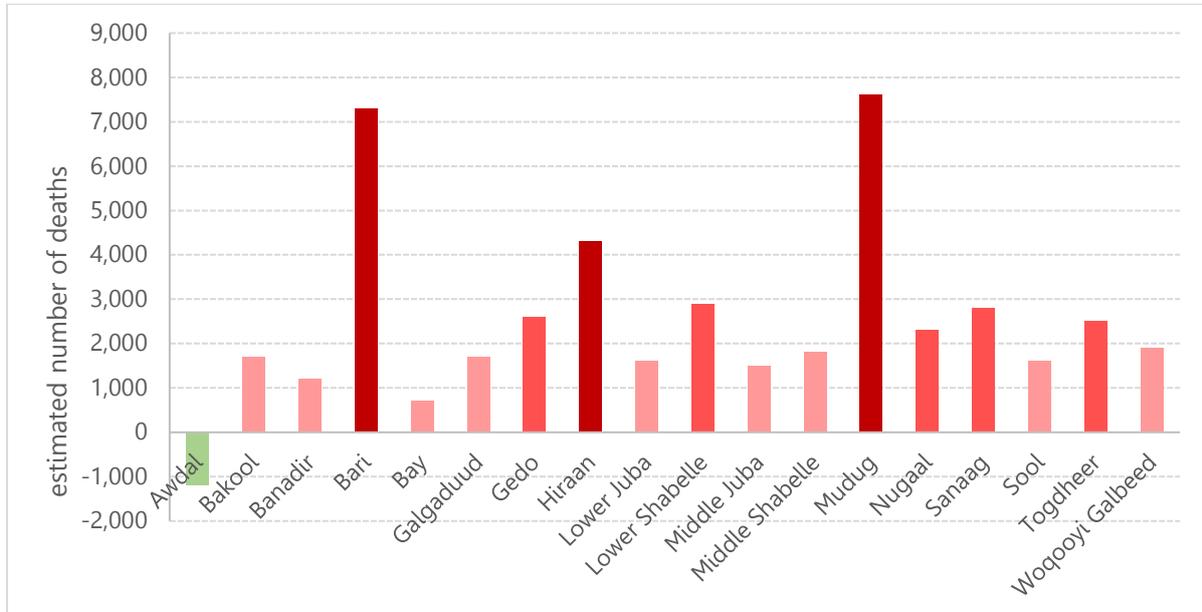


Figure. Crisis-attributable deaths by region of Somalia, 2017-2018. Note: negative figures indicate fewer deaths were projected to occur during the crisis than if baseline conditions had been maintained.

## Policy recommendations

The response to 2010-2012 events was widely regarded as inadequate and delayed. The recent drought crisis in Somalia appears to have triggered a more proactive and far-reaching humanitarian response. Nevertheless, even more needs to be done in order to prevent preventable crisis-induced deaths in future.

Somalia and other fragile regions of the world face an increased threat of drought. Understanding the impact these events have on that most fundamental of quantities – human survival – can support rational resource allocation and increase accountability of humanitarian responders. Analyses of attributable mortality should thus become a systematic component of monitoring and evaluation in similar crises.

Based on our findings, we formulate the following key recommendations:

**Respond even earlier:** Excess deaths don't just happen when conditions reach famine levels – substantial mortality occurs as soon as populations become stressed. Humanitarian responses thus need to be ahead of the curve – this means scaling up as soon as crisis indicators well upstream of mortality, such as worsening food security, are noted. In economic terms, this might also result in more efficient resource allocation – preventive interventions to improve livelihoods and resilience are costly, but reacting to downstream effects such as epidemics and malnutrition may require an even greater effort.

### Putting the numbers in context

- Our estimated number of crisis-attributable deaths during 2017-2018 is the passenger equivalent of more than 100 Boeing 747 airliners
- Even in a favourable year without drought, the difference in 'baseline' death rates between Somalia and more stable, resilient countries of East Africa translates to more than 100,000 additional deaths.

**Focus on the most vulnerable:** Mortality risk is most likely to be clustered within particularly vulnerable communities and households. More specific targeting of finite resources to support these communities and individuals would probably increase the cost-effectiveness and efficiency of humanitarian responses.

**Strengthen the capacity to monitor and evaluate drought-triggered crises:** Death toll estimation is an important method for benchmarking the gravity of a crisis. Estimation, however, should henceforth be undertaken prospectively in order to accompany responses.

During our analysis, we found a particular dearth of consistently available and curated public health data on disease burden and services, which hampers both needs analysis (e.g. Integrated Phase Classification exercises) and crisis impact assessment. We recommend the establishment of a national health observatory, involving both international and Somali authorities and actors, that would serve as a repository of public health information and rapidly undertake holistic, action-orientated public health situation analyses. Such an observatory could also lead on mortality surveillance.

**Support population resilience to future shocks.** There is a need to focus on the root causes of vulnerability. More needs to be

done to strengthen Somali livelihoods so as to prevent shocks from becoming full-fledged crises. This requires intense, focussed coordination among humanitarian sectors, development partners and national actors, and the establishment of a securely funded, multi-year, transparently evaluated resilience-building programme, leveraging the best evidence on effective, appropriate interventions.

**Redouble peace-building efforts:** Insecurity is a key driver of death. Armed conflict and the securitisation of much of Somalia worsen the severity of droughts and underlie the chronic vulnerability of Somali people to unfavourable climate. Efforts to restore peace and stable governance to all of Somalia holds perhaps the greatest potential for lessening the impact of droughts and other natural disasters on the Somali population.

### Key recommendations

- Respond even earlier
- Efficiently target the most vulnerable communities
- Strengthen crisis monitoring and evaluation capacity
- Support population resilience to shocks

### Key references

#### 2010-2012 estimation study

Food and Agriculture Organisation, Famine Early Warning Systems Network (2013). Mortality among populations of southern and central Somalia affected by severe food insecurity and famine during 2010-2012. Rome and Washington, DC: FAO and FEWS NET. <http://www.fsnau.org/in-focus/study-report-mortality-among-populations-southern-and-central-somalia-affected-severe-food->

## Updated estimates

Warsame A, Frison S, Gimma A, Checchi F (2020). Retrospective estimation of mortality in Somalia, 2014-2018 a statistical analysis. London: LSHTM. <https://www.lshtm.ac.uk/research/centres/health-humanitarian-crises-centre/>

## Contact

Abdihamid Warsame, Department of Infectious Disease Epidemiology, London School of Hygiene and Tropical Medicine, Keppel Street, London, UK. e-mail [Abdihamid.warsame@lshtm.ac.uk](mailto:Abdihamid.warsame@lshtm.ac.uk) .

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