

How weather and conflict shocks affected internal displacement in Somalia

during the 2016/17 drought

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Study background: Somalia

- Located at the Horn of Africa
 - Population: 15.4 million (2019), annual demographic growth rate of 2.9 %
 - Compounding vulnerabilities and displacement risks include
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- Over 2.9 million Internally Displaced People (IDPs) across Somalia, according to the Internal Displacement Monitoring Centre (IDMC, 2021).

In Somalia, migration stories have a drought and a conflict chapter

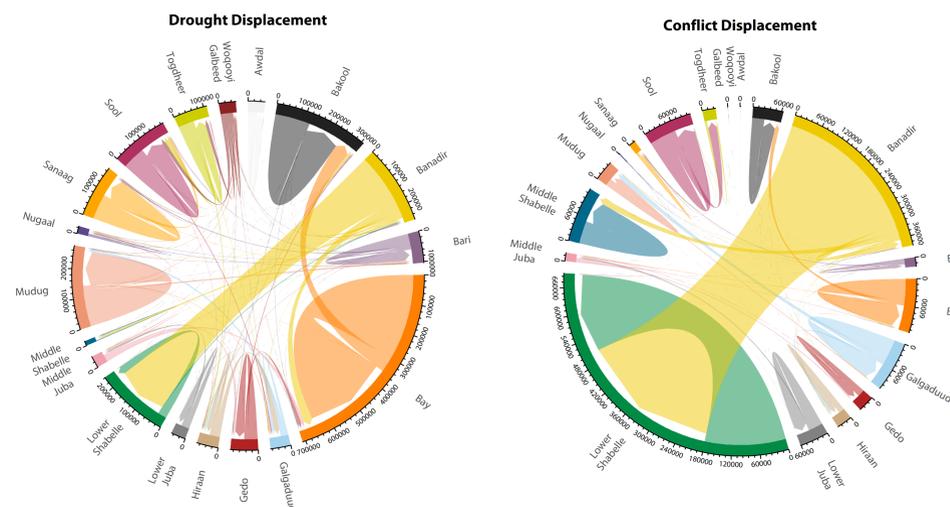
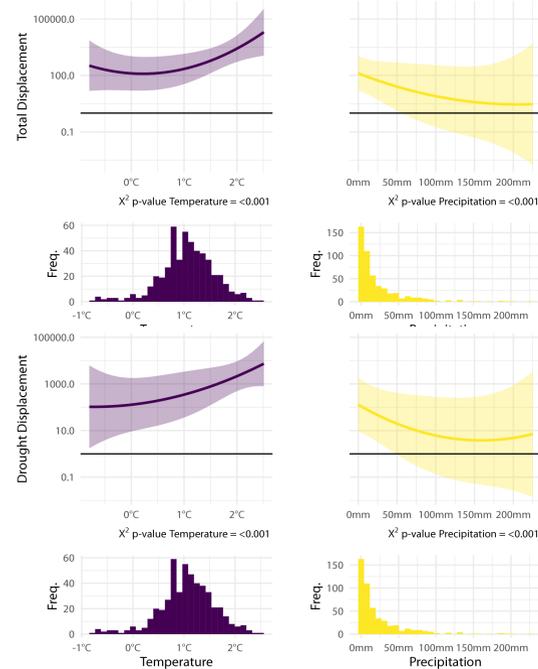


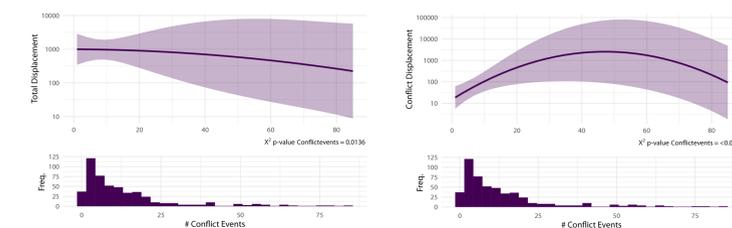
Figure 3: What IDPs report as displacement reason across Somalia's 18 regions from 2016 to 2018. Source: UNHCR data.

A) Effects of extreme weather on displacement



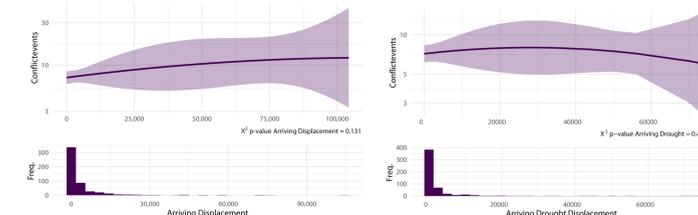
- Figure 4 shows that increases in temperature extremes from 1°C to 2°C led to a ten-fold increase in displacement;
- Drought conditions (reduction in precipitation from 50mm - 0mm) led to around a four-fold increase in displacement.

B) Conflict effects on displacement



- Figure 5 shows the effects of conflict on displacement
- Increase of 25 conflict events led to 50-fold increase in displacement.

C) Displacement effects on conflict



- Figure 6 shows the effect of in-migration on conflict
- Displacement itself has no detectable effect on the occurrence of conflict events.

How can weather and conflict shocks affect internal displacement?

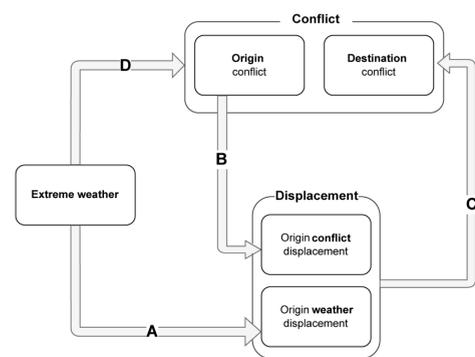


Figure 1: Conceptual framework illustrating interaction pathways. Main interaction pathways: 1) Effects of extreme weather on displacement; 2) Conflict effects on displacement; 3) Displacement effects on conflict.

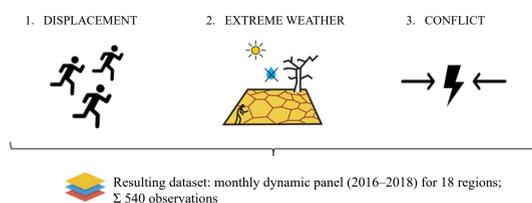


Figure 2: Data input. Model input: (1) internal displacement flows (2) extreme weather observations (3) conflict events.

Take-home messages

- We find non-linear effects of temperatures where higher than usual temperatures lead to increased displacement
- We then model the aggregate displacement response (summed over all self-reported categories) as a function of conflict at the origin region (i.e., channel B in isolation, relating how many people leave a region to the number of conflict events in that region).
- We find no statistically significant effects. However, this result might be driven by data-aggregation and conflation of different reasons for displacement.
- Once we isolate the subset of IDPs who self-report to be displaced due to conflict, we find large and significant effects.