

Somalia Resilience

Recurrent Monitoring Survey Brief

Introduction

This brief presents findings from a two-year study of resilience in Somalia, a follow-up to the baseline study of the Enhancing Resilience and Economic Growth in Somalia (EREGS) program.¹ Communities in the study area were served by one of three resilience-building projects under EREGS from 2014-2017.

The current study examines how the three resilience capacities—absorptive, adaptive, and transformative—helped households in the study area mitigate, adapt to, and recover from shocks and stresses. It provides important insights into how households were able to improve food security and recover from drought despite prolonged exposure to a shifting array of climate, economic, employment, and health shocks, including “downstream” shocks such as un/under-employment, crop disease, food and input price shocks, and chronic disease. The study analyses three well-being outcome measures: Household Food Insecurity Access Scale (HFIAS); moderate to severe household hunger, computed using the Household Hunger Scale (HHS); and households’ perception of their recovery from drought.

The data for this study are from a baseline survey in May 2016 and three rounds (R1-R3) of a recurrent monitoring survey (RMS) in May, August, and December 2017. This period covered the drought from the beginning to near its end, which provided an opportunity to better understand how program activities helped households during a severe climate shock. However, EREGS programs were among many operating in Somalia during the drought, so while findings indicate some program elements were effective in reducing drought impacts, we cannot attribute the changes directly to USAID programming.



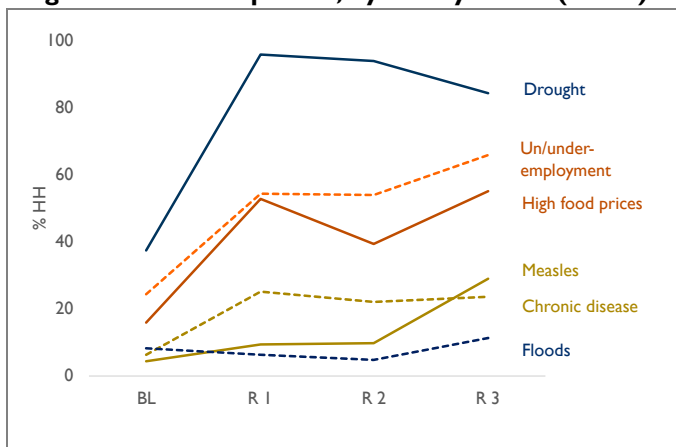
Photo: Thomas Jepson-Lay / Save the Children

¹ Langworthy, M., M. Vallet, S. Martin, T. Bower and T. Aziz. 2016. Baseline Study of the Enhancing Resilience and Economic Growth in Somalia Program. Prepared by TANGO International for Save the Children Federation, December.

Key points emerging from the RMS include:

- Prolonged drought throughout the study period, as well as flooding in late 2017, were both widespread. Each triggered secondary, “downstream” shocks that exacerbated food insecurity and compromised households’ ability to recover.
- Absorptive, adaptive, and transformative capacity levels all increased after baseline. Higher capacity levels are driven by productive asset ownership, informal safety nets, exposure to information, disaster preparedness, conflict mitigation, access to communal resources, agricultural extension, and livestock services.
- The findings suggest that continued development programming during a drought supports resilience capacities and improves well-being outcomes.

Figure 1: Shock exposure, by survey round (% HH)



Sources: USAID. 2016, 2017. Somalia household surveys.

Key Findings

SHOCKS

More than 18 months of drought triggered a series of “downstream” shocks in the study area (see Figure 1). Rivers dried up, and for rural households, nearly all crops failed. Without a harvest, agricultural employment disappeared, and food prices rose at a time when households were forced to switch from producing food to purchasing it. Lack of pasture and water for livestock caused low livestock reproduction and livestock disease and death. Households that sold their livestock received lower-than-usual prices due to the poor condition and oversupply of animals.² A large-scale cholera outbreak and a measles outbreak started shortly after the onset of the drought and continued past its end. Rains returned in November 2017 but resulted in widespread flooding, which generated a new series of downstream shocks.




By May 2017 (R1), drought affected almost all households. By December 2017 (R3), exposure to drought was decreasing, but a large portion of households were still reporting downstream shocks. Unemployment, increased food prices, and chronic illness were at their highest levels and households were reporting flooding. Overall shock exposure – the count of different types of shocks households experienced in the past 12 months – was highest in R1 and R3, with five shocks on average.

RESILIENCE CAPACITIES

The surveys collected data to compute absorptive, adaptive, and transformative resilience capacity indices at each round and answer the research question, *How do resilience capacities change over time?* All three capacities were higher in the RMS rounds than at baseline.

² FSNAU. 2017. Nearly three million people in Somalia face crisis and emergency acute food insecurity. February 2. <http://www.fsnau.org/in-focus/fsnau-fewsnet-technical-release-february-2017>

Table 1: Well-being outcomes, by survey round

	BL	R1	R2	R3	Trend
Moderate or severe hunger (%HH)	43.6 ^{ab}	58.7 ^a	56.0 ^b	47.9 ^{ab}	
HFIAS (mean, 0-27)	9.6 ^{ab}	11.7 ^a	12.7 ^{ab}	11.2 ^b	
n	976	976	602	568	^a
Recovered from drought (%HH)	6.8 ^a	12.9 ^a	10.3 ^{ab}	26.2	
n	366	926	565	496	

Subgroups with the same superscript are significantly different at the 0.05 level.
Comparisons are across columns.
Sources: USAID. 2016, 2017. Somalia household surveys.

As shown in Figure 2, absorptive capacity continued to build from the baseline through R2 and maintained fairly level through R3. Adaptive capacity was highest in R1, dropped in R2, and maintained R2 levels through R3. Transformative capacity increased through R2, then fell in R3. Higher capacity levels are due to factors that are also USAID program foci: productive asset ownership (provision of tools to farmers), informal safety nets (savings, women’s, and civic groups), exposure to information, disaster preparedness, conflict mitigation, access to communal resources, agricultural extension, and livestock services.

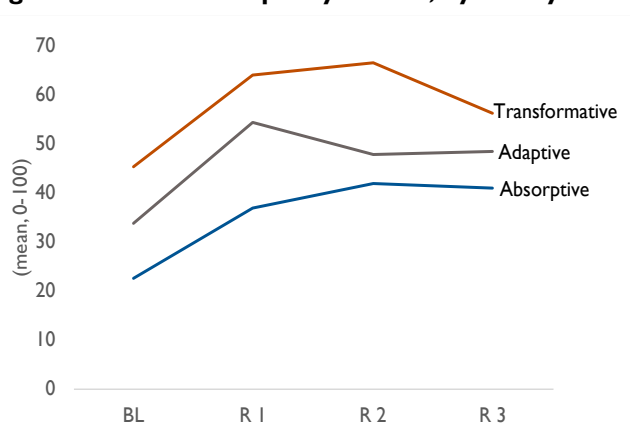
OUTCOMES

This study defines resilient households as those that improve or maintain their well-being even in the face of shocks. Table 1 summarizes the outcomes findings. The two food security outcomes, household hunger and HFIAS worsened (increased) in R1 and R2, as shock exposure was increasing. In R3, households were beginning to bounce back. Household hunger and HFIAS were lower in R3 than in R2, but still higher than baseline. Households showed resilience in terms of drought recovery, which was at its highest level in R3.


One objective of this research was to understand how baseline levels of resilience capacities affected outcomes in RMS rounds. This question was particularly important in light of improvements in R3. This analysis found:

- Baseline absorptive capacity increased the probability of recovery in R1 and R2 and reduced (improved) the probability of moderate to severe hunger and HFIAS in R2.
- Baseline adaptive capacity reduced the probability of moderate to severe hunger in R1 and R2. It reduced HFIAS in R1 and R3.
- Baseline transformative capacity reduced HFIAS in R2 and R3.

Figure 2: Resilience capacity indices, by survey round



Sources: USAID. 2016, 2017. Somalia HH and community surveys.



The data did not show that baseline levels of resilience capacities were linked to the improvements in hunger and recovery between R2 and R3. However, because the study collected information to compute resilience capacity indices in all three rounds, we were able to estimate the effects of resilience capacities at R1 and R2 on outcomes in later rounds. Results yielded the following findings:

- Absorptive capacity in R2 reduced the probability of moderate to severe hunger in R3.
- Absorptive capacity in R1 and R2 increased the probability of recovery in R3.
- Adaptive capacity in R1 and R2 reduced the probability of moderate to severe hunger in R3.

Humanitarian assistance, a component indicator, was found to increase resilience. About two-thirds of households reported receiving one or more types of humanitarian aid: cash aid, food aid, cash/food for work, irrigation water, or drinking water. Analysis of the relationship between humanitarian assistance and resilience capacities showed that each type of assistance increased the adaptive capacity index score by about 4.5 points (on a scale of 0-100).

Implications for Programming

Households in this study were able to reduce hunger and improve recovery after a long period of exposure to drought and multiple downstream shocks because absorptive, adaptive, and transformative resilience capacities increased during the drought. The findings indicate that continued development programming during a drought supports resilience capacities and improves well-being outcomes.

The study contributes to previous evidence that the three resilience capacities help households to recover from shocks. It also documents higher levels of resilience capacities during the drought, and how the increases improve well-being indicators. Several resilience capacity components driving the increases were the focus of USAID or similar programs.

Humanitarian assistance increased household adaptive capacity. This, combined with the previous two findings, indicates the importance of layering humanitarian and development assistance during shocks.


The complex and shifting array of shocks indicates that programming should focus on more than drought. Programs need to factor in the complex risks in the given shock context, especially the downstream effects of drought that continue long after the drought is over.

Background Information

The study area covers urban, peri-urban, and rural communities in southern Somalia in the Gedo, Bay, and Lower Shebelle regions and the Sanaag region in Somaliland. Communities in the study area were served by one of three resilience-building projects under the EREGS program:

- Somalia Towards Reaching Resilience (STORRE) – CARE;
- Program to Enhance Resilience in Somalia (PROGRESS) – Catholic Relief Services; and
- Resilience and Economic Activity project in Luuq (REAL) – World Vision.

Household-level programming under EREGS included providing tools to farmers; digging pit latrines and shallow wells; and providing households with information about climate and weather changes, health, hygiene, sanitation and nutrition, market prices, agricultural production and livestock health. Community-level activities included savings groups, disaster preparedness planning, conflict management, and rehabilitating communal irrigation canals and rangeland.



The RMS covers a subset of the baseline respondents and all baseline communities. Data were collected from households and communities. Sample sizes are as follows: 976 for baseline and R1, 602 for R2, and 568 for R3. Because the RMS samples are not randomly selected, survey findings are not generalizable. Despite this, the study yields important findings about household resilience in a severe drought: the survey rounds cover the same households over time and allow for longitudinal analysis techniques to estimate how resilience capacities and programming in one period affected outcomes later on.

The baseline study was funded by the USAID Office of Foreign Disaster Assistance, USAID Office of Food for Peace, and USAID East Africa Regional Mission. Funding for the resilience analysis comes from the USAID Center for Resilience.