Study Suggests 258,000 Somalis died due to severe food insecurity and famine

Half of deaths were children under 5

NAIROBI/WASHINGTON May 2, 2013 — A new study estimates that famine and severe food insecurity in Somalia claimed the lives of about 258,000 people between October 2010 and April 2012, including 133,000 children under 5.

Jointly funded and commissioned by the United Nations Food and Agriculture Organization’s (FAO) Food Security and Nutrition Analysis Unit for Somalia (FSNAU) and the USAID-funded Famine Early Warning Systems Network (FEWS NET), the study is the first scientific estimate of the death toll from the food security emergency. The study suggests:

- An estimated 4.6 percent of the total population and 10 percent of children under 5 died in Southern and Central Somalia.
- Lower Shabelle, Mogadishu, and Bay were hardest hit, with the proportion of children under 5 who died in these areas estimated to be about 18 percent, 17 percent, and 13 percent, respectively.
- Mortality peaked at about 30,000 excess deaths per month between May and August 2011 (see figure).

“With the expertise of two renowned institutions, we now have a picture of the true enormity of this human tragedy,” said Mark Smulders, Senior Economist for FAO. “Lessons drawn from this experience will help the international community, together with the people of the region, build a stronger and more resilient future.”

Lead authors of the study were Francesco Checchi, an epidemiologist and senior lecturer at the London School of Hygiene and Tropical Medicine, and Courtland Robinson, a demographer and Assistant Professor at the Center for Refugee and Disaster Response at the Johns Hopkins Bloomberg School of Public Health in Baltimore, Maryland.

“By nature, estimating mortality in emergencies is an imprecise science, but given the quantity and quality of data that were available, we are confident in the strength of the study,” said Chris Hillbruner, Decision Support Advisor for FEWS NET. “It suggests that what occurred in Somalia was one of the worst famines in the last 25 years.”

The study set out to quantify mortality attributable to severe food insecurity and famine, as well as when and where most deaths occurred. Other issues, such as the humanitarian response, were not evaluated. The study covered all of southern and central Somalia, the areas most affected by the 2010-11 drought, subsequent spikes in staple food prices, and constraints on humanitarian access. Mortality among new refugees arriving to camps at Dadaab, Kenya and Dollo Ado, Ethiopia was also assessed.

To capture the full scope of the emergency, the study considered a 28-month time period, from April 2010 to July 2012. However, the mortality estimates relate specifically to October 2010 to April 2012.

The figures are in addition to the 290,000
“baseline” deaths estimated to have occurred in the same area during the same period. That baseline, which includes conflict-related deaths, represents a mortality rate that is twice as high as the sub-Saharan average.

Compared to the 1992 Somalia famine, in which an estimated 220,000 people died over 12 months, the death toll for the recent event was higher. But the earlier famine is considered more severe because a larger percentage of the population died.

*Availability of Data Underpins a Credible Analysis*

The quantity and quality of available data were considerably better than for past studies of famine mortality in Africa. Researchers drew on 200 mortality surveys conducted by FSNAU and partners in Somalia since 2007—including 61 from the emergency period—as well as data on food prices, wages, epidemics, conflict, and humanitarian assistance.

Using these data, the researchers developed a statistical model to estimate mortality for areas and time periods where information was unavailable. Demographic analysis of population movement was used to refine population and mortality estimates. For the refugee camps, where data were more limited, the study offers plausible ranges of mortality, rather than a single estimate.

The study, along with source data and statistical code, can be downloaded from www.fsnau.org or www.fews.net.

*Several Factors Led to Famine*

In July 2011, the UN declared famine in two regions based on FSNAU and FEWS NET analysis. In August and September, the declaration was extended to other regions. After a substantial increase in emergency assistance in September and October, a sharp decline in local cereal prices, and an excellent October to December 2011 rainy season, food security improved. The UN declared the famine’s end in February 2012.

A combination of events triggered the famine. First, the year before the famine declaration (July 2010-June 2011) was the driest in the eastern Horn of Africa in 60 years. The result was widespread livestock deaths, the smallest cereal harvest since the 1991-94 civil war, and a major drop in labor demand, which reduced household income.

Second, the level of humanitarian assistance delivered in southern Somalia in 2010 and much of 2011 was very low, especially compared to 2008/09 when food aid accounted for a significant proportion of national cereal supply. In many areas, conflict and insecurity impeded humanitarian assistance and access.

As a result, at a time when drought made poor households more market dependent, reduced supplies drove staple food prices to extreme levels. In Bay region, for example, the price of red sorghum rose 240 percent between June 2010 and June 2011. For millions of Somalis, already weakened by chronic food insecurity and persistently high levels of acute malnutrition, the shocks were catastrophic.

As the drought unfolded, FEWS NET and FSNAU issued a series of 16 increasingly dire warnings, in addition to their regular reporting. The first warning of drought was issued in an August 2010 FEWS NET special report. A March 2011 multi-agency alert warned that famine was likely if the April-June rains failed.

FSNAU and FEWS NET began working collaboratively in 1995.

### About FSNAU

FSNAU is a multi-donor FAO project that provides a broad range of stakeholders with information on food security, nutrition, and livelihood security for improved emergency response and development planning. With a staff of 70, half of whom reside in Somalia, FSNAU conducts monthly monitoring of key indicators of nutrition and food security, implements regular national assessments, and generates situation analyses. In addition, FSNAU conducts research into the underlying causes of chronic food and nutrition insecurity and provides capacity development to Somalia authorities and local NGOs. See [www.fsnau.org](http://www.fsnau.org) for more information.

### About FEWS NET

FEWS NET is a leading provider of early warning and food security analysis. Created in 1985 by the US Agency for International Development (USAID) after devastating famines in East and West Africa, FEWS NET provides objective, evidence-based analysis for 36 of the world’s most food-insecure countries. With offices across East Africa, FEWS NET has worked in Somalia since 1995. See [www.fews.net](http://www.fews.net) for more information.