

Rapid Social Response Story Series No. 11

Ethiopia: Strengthening the Nutrition Information and Early Warning System



RAPID SOCIAL RESPONSE



[Ethiopia](#) is ecologically diverse. Tropical forests, desertsⁱ, large number of rivers, waterfalls, volcanic hot springs, and some of the highest mountains in Africa are all part of the natural landscape. [Ethiopia](#) is also one of the oldest civilizations. With 82 million people, it is the second most populous country in sub-Saharan Africa and the most populous landlocked country in the world. At the same time, the country is one of the poorest. In 2010, [Ethiopia's per capita income](#) was 390 US dollars, much lower than the Sub-Saharan African average of \$1,176 US dollars.



The country is vulnerable to climate changes and weather-induced shocks. [Ethiopia](#) experienced a severe drought from 2002 to 2003, and in 2011, along with the rest of the Horn of Africa, suffered from the worst drought in 60 years. High population growth rates, declining farm sizes, and environmental degradation contribute to the country's vulnerability. Adding to the environmental concerns is access to affordable food. Due to the drought, domestically produced food prices have increased and imported food prices have risen as well. These combined factors are placing economic pressure on all families, but especially the poor. For example, during a period of global food crisis in 2009, the estimated beneficiaries receiving emergency relief rose from 4.9 million in January to 6.2 million in the second half of the year. The global financial crisis has also affected Ethiopians living overseas and as a result, remittances to family members in the country have decreased.

One manifestation of the country's climatic and economic challenges is malnutrition, which is a prevalent and persistent problem across income groups. [Ethiopia](#) has among the highest rates of malnutrition in Sub-Saharan Africaⁱⁱ. [Anemia](#) affects 54 percent of children under 5 and 27 percent of womenⁱⁱⁱ. [Protein-Energy Malnutrition \(PEM\)](#) is responsible for 137,000 child deaths a year^{iv}. [Stunting](#), one of the markers of [PEM](#) and largely irreversible after age 2, afflicts 47 percent of children under 5^v. [Vitamin A Deficiency \(VAD\)](#) damages a child's immune system lowering their resistance to common infections. It also leads to about 80,000 deaths a year and affects 61 percent of children under 5^{vi}.



Besides the devastating loss of life, [Ethiopia](#) loses hundreds of millions dollars' worth of productivity every year due to malnutrition. [Iodine Deficiency Disorder \(IDD\)](#) robs 3.5 million children of as many as 15 IQ points, reduces their ability to learn and concentrate, and causes high dropout rates in primary schools. [IDD](#) substantially reduces the benefits of [Ethiopia's](#) large investments in schools and education. [Iron Deficiency Anemia](#) not only affects the intellectual development of children but also has far-reaching effects on labor productivity among adults. Furthermore, malnourished survivors require additional health care services, increasing the costs of hospitalization and outpatient care in a country.

Though food insecurity is an important issue in [Ethiopia](#), it is only one factor contributing to malnutrition. Other non-food factors include feeding practices such as lack of breast feeding, health interventions, and adequate water and sanitation, childcare practices, and hygiene, health interventions. To address some of these intervening factors, the government and development partners have developed the [National Nutrition Program \(NNP\)](#), a multi-sectoral approach for addressing malnutrition to which a [World Bank](#)-funded nutrition project makes a major contribution. Part of this approach is to improve capacity to collect accurate nutrition data and to monitor the nutrition indicators throughout the country.

When nutrition indicators are examined over time, and triangulated with contextual information, they can be used to interpret seasonal fluctuations and local thresholds for response, and thus to aid decision-making on targeting, or intervention, or to monitor response to crises. Obtaining nutrition indicators is especially critical for addressing malnutrition due to weather-induced, economic, or agricultural crises across the country that may vary by regions, zones and even within districts. Additionally, nutrition indicators have the advantage of being able widely available and easily understood. Up to present, however, [Ethiopia's](#) crisis early warning system has not included nutrition data though it has tracked information on mortality, disease, and food security.



In order to strengthen early warning capacity, the government is building on the Community Based Nutrition (CBN) program, which is operating in 238 of 630 districts and promotes nutrition of women and children through a cadre of community-based volunteers. These volunteers are supported by the health extension workers, the backbone of community-based care and preventative services in the Ethiopian health system. As part of CBN, nutrition data are collected through growth monitoring and promotion sessions for children under two. These data are transmitted from the community-based volunteers to the federal level through monthly reports. Additional training is needed at all levels to build capacity to use these nutrition data for early warning purposes.

Funding from the [World Bank's Rapid Social Response Program](#) is^{vii} expected to improve nutrition data collection and analysis and build capacity to respond quickly and flexibly to worsening nutrition situations. The project will focus on the health supervisors who oversee the community-based cadre of volunteers and health extension workers. The priority will be to improve the quality and utilization of CBN data, including revising training materials, building capacity to provide on-the-job training to the community-based cadres, and development and implementation of quantitative supervisory checklists to improve data quality. A second main feature is providing funding to the [Ethiopian Health and Nutrition Research Institute](#) to improve the overall use and analysis of nutrition data in the country. The Institute is creating a database that will allow analysis of nutritional trends and improve capacity for surveillance through compilation of nutrition, health, and other contextual data from various sources.

Also, this project will include a pilot to determine the extent to which cell phones can be used as a data collection tool to enhance the quality and timeliness of community-based nutrition data. More specifically, this project will test whether Health Extension Workers can send more accurate and timely data from the health posts to the regional and federal levels by using cell phones compared to using paper-based reporting.

The RSR funded activities will be completed by August 2012.

Written by Andrea L. Robles, February 2, 2012

This article does not necessarily reflect the views of the [World Bank Group](#), its [Executive Directors](#) or the [governments](#) they represent. [Rapid Social Response Program \(RSR\)](#) is part of the [World Bank's](#) response to the [Food, Fuel and Financial Crisis](#). Its mission is to help the World's poorest countries become better prepared to cope with systemic and unpredictable shocks. [RSR](#) has been generously supported by the governments of the [Russian Federation](#), [Norway](#) and [United Kingdom](#). For further information, please visit <http://www.worldbank.org/rsr>.

ⁱThe country is known to have one of the hottest locations in the world, [Dallol](#).

ⁱⁱ[Project Appraisal Document \(PAD\), to the Federal Democratic Republic of Ethiopia, For a Nutrition Project](#), pp. 1-3, April 1, 2008.

ⁱⁱⁱ[Central Statistical Agency](#) (Ethiopia) and ORC Macro. 2006. [Ethiopia Demographic and Health Survey 2005](#). Addis Ababa, Ethiopia and Calverton, USA: Central Statistical Agency and ORC Macro.

^{iv}[PAD](#), 2008, p. 1

^v[Central Statistical Agency](#) (Ethiopia) and ORC Macro. 2006

^{vi} Demissie T, et al. [Magnitude and distribution of vitamin A deficiency in Ethiopia](#). [Food and Nutrition Bulletin](#). 31(2):234-41. 2010.

^{vii} The World Bank team leader for this project is Ziauddin Hyder (Senior Nutrition Specialist, Africa Health, Nutrition & Population).