

The Social and Economic Impact of Child Undernutrition in Rwanda



## **About the Study**

The Cost of Hunger in Africa (COHA) Study is led by the African Union Commission (AUC) and NEPAD Planning and Coordinating Agency and supported by the Economic Commission for Africa (ECA) and the UN World Food Programme (WFP). COHA is a multi-country study aimed at estimating the economic and social impacts of child undernutrition in Africa.

In March 2012 the COHA Study was presented to African Ministers of Finance, Planning and Economic Development, who met in Addis Ababa, Ethiopia. The ministers issued Resolution 898 confirming the importance of the study and recommending it continue beyond the initial stage.

The COHA study is being carried out in twelve countries, namely: Botswana, Burkina Faso, Cameroon, Rwanda, Ethiopia, Ghana, Kenya, Malawi, Mauritania, Rwanda, Swaziland, and Uganda. The data in this document are the results collected from the COHA initiative in the four first-phase countries, Rwanda, Ethiopia, Swaziland, and Uganda.

In Rwanda, the study is implemented by the National Implementation Team (NIT) responsible for collecting, processing and presenting results. The NIT composed of Dr. Victor Mivumbi,Mr. Leopold Kazungu, and Mr. Alexis Mucumbitsi from the Ministry of Health (MINISANTE, Chair), Mr. Claude Bizimana from the Ministry of Agriculture and Animal Resources (MINAGRI, Cochair), Ms. Yvonne Umulisa from the Ministry of Finance and Economic Planning (MINECOFIN), Mr.Fabien Mpayimana from the National Institute of Statistics Rwanda (NISR), Ms. Claudine Mukagahima from the Ministry of Education (MINEDUC), Mr.Samuel Munyakayanzafrom the Ministry of Foreign Affairs and Cooperation (MINAFFET), Mr.VédasteHakizimana from the Ministry of Local Government (MINALOC), Ms.Franklina Mantilla, REACH facilitator, and Ms. Dong-eun Kim from WFP.

During the process, all data for the study were collected from National Institute of Statistics of Rwanda (NISR), Demographic and Household Survey (DHS) 2010, National Institute of Statistics of Rwanda, Statistical Yearbook 2012, budget execution report 2011-2012, Ministry of Economic Planning and Finance, Ministry of Health (MOH), ICF International 2012, UN Population Division, as well as primary data collection.

The COHA model is used to estimate the additional cases of morbidities, mortalities, school repetitions, school dropouts, and reduced physical capacity that can be directly associated to a person's undernutrition before the age of five, and the associated costs to an economy.



Undernourished children are at higher risk of anaemia, diarrhoea, and respiratory infections. These additional cases of illness are costly to the health system and families. Undernourished children are at higher risk of dying.



6-18 years

Stunted<sup>1</sup> children are at higher risk of repeating grades in school and at higher risk for dropping out of school. Additional instances of grade repetitions are costly to the education system and families.



**15-64** years

If a child dropped out of school early and is working in nonmanual labour, he/she may be less productive. If s/he is working in manual labour he/she has reduced physical capacity and may be less productive. People who are absent from the workforce due to undernutrition-related child mortalities represent lost economic productivity.

'Stunting: the height for age index, and it is a result of a failure to receive adequate nutrition over a long period of time or the effect of chronic illness.

## 10 Things Everyone Should Know about Child Nutrition in Rwanda

- Today, there are more stunted children in Rwanda than 10 years ago
- Only I out of every 3 children with undernutrition is estimated to be receiving proper health attention
- Most of the health costs associated with undernutrition occur before the child turns I year-old.
- 21.9% of all child mortality cases in Rwanda are associated with undernutrition.
- 12.7% of all repetitions in primary school are associated with stunting
- Stunted children achieve 1.1 years less in school education.
- Child mortality associated with undernutrition has reduced Rwandans workforce by 9.4%
- 49.2% of the adult population in Rwanda suffered from stunting as children.
- The annual costs associated with child undernutrition are estimated at 503.6 billion RWF, which is equivalent to 11.5% of GDP
- Eliminating stunting in Rwanda is a necessary step for inclusive development in the country.



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## **COHA** Project is supported by:







