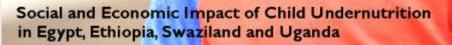
## The Cost of HUNGER in AFRICA

Implications for Africa's Social and Economic Transformation







UN Economic Commission



African Union

## Cost of Hunger in Africa

Implications of Child Undernutrition for Africa's Social and Economic Transformation





## **COHA – An African Union Led Initiative in Nutrition implemented by Member States**





The Cost of Hunger in Africa is an African Project, led by the African Union, implemented by members states, and will help to improve the NEPAD Africais childrance in nutrition related issues and serves as a convener to insure the integration in complementary regional actions

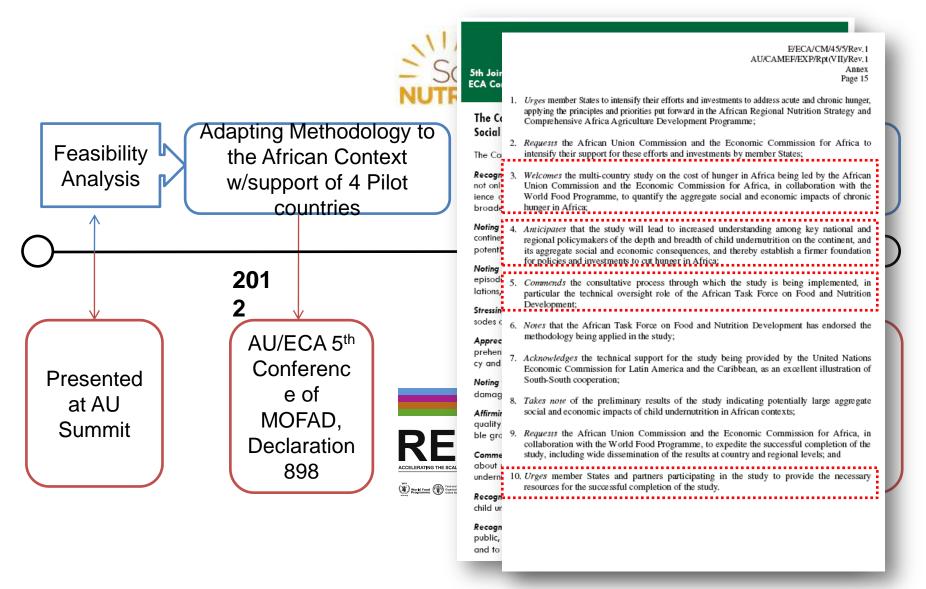


The technical aspects are led by UNECA, in a South-South partnership with ECLAC as part of a regional program to develop analytical tools



The World Food Programme provides field-level expertise and support at country level through its expanded presence in Africa

# **A Brief RECAP of the COHA**

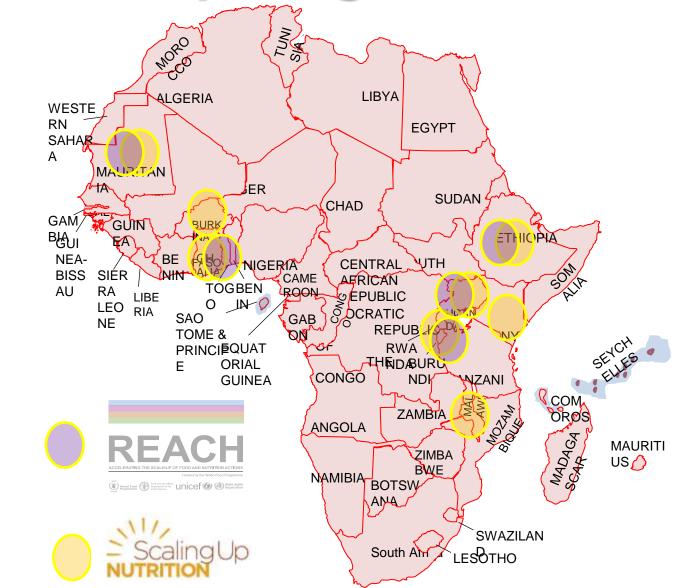


# **12 Initial Participating Countries**

4 Pilot Countries

Egypt Swazilanci Ethiopia 8 Roll-Out Countries

Burkina Faso Ghana Botswana Malawi Mauritania Rwanda Kenya



This map was provide a sector of the boundaries and names shown and the designations used on this map do not imply official endorsement or

# The time for Africa is now

Most important economic expansion period in the last 30 years. Yet, it is not enough

Shift from a commodity-driven growth strategy, diversified, industrialization and integration of products into national and regional value chains.

Youth population with decent labour opportunities in economic activities that will also help Africa move towards a
more industrialized and urbanized society that builds on the continent's comparative advantages.

Focus on ensuring human capital growth through improved health, education and labour productivity.

• The gap in access to health services between the rural and urban population must be. The continent cannot afford the losses in human capital associated with poor health and its consequences to society.

Implications of urbanization in Labour Markets

 Africa, having the highest percentage of youth, with over 40 percent of the population in sub-Sahara under the age of 15, stands to gain important human capital by reducing dropout rates in schools and increasing the educational levels.

The Cost of Hunger in Africa (COHA) study demonstrates that the transformation agenda for Africa cannot effectively be achieved without addressing child undernutrition.

#### Framework for the Cost of Hunger in Africa THE COST OF **HUNGER IN AFRICA** Lower Productivity Increased Lower Social inclusion Higher labor demand to social Performance in absenteeism problems services Manual Labor Lower educational performance Higher morbidity Cognitive and Higher Lower physical risks: Acute and psychomotor mortality risk capacity Chronic illnesses underdevelopment Undernutrition

# **Presentation of Results**

The following data are the result of the work carried-out by a national implementation team that collected, processed and analyzed official data, and supported the adaptation of the model to estimate the social and economic impact of child undernutrition in Africa.

## Effects on **HEALTH** Results from 4 Pilot Countries

**Malnutrition** in children predisposes to a variety of health and developmental risks that can be reversed if tackled at the early stages of a child's life. For every additional case of child illness, both the families and health system and are faced with additional economic costs.

# Incremental morbidity associated with underweight children

#### EGYPT

Underweight children: 659,000 Incremental morbidity Episodes: 901,440 Economic Cost: US\$213 million

### **ETHIOPIA**

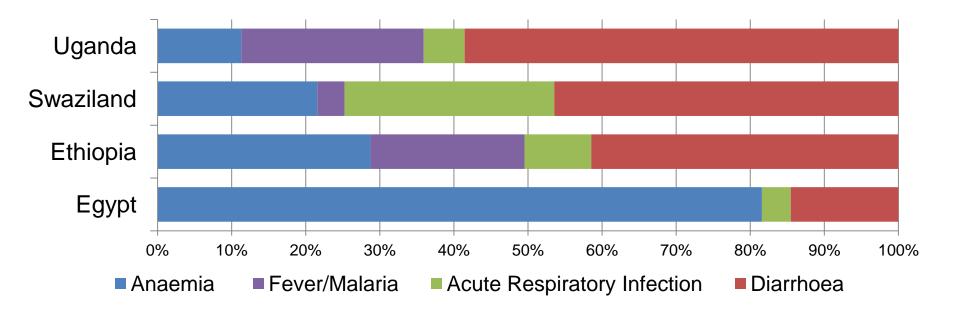
Underweight children: 3.0 million Incremental morbidity Episodes: 4.4 million Economic Cost: US\$155 million

#### SWAZILAND

Underweight children: 9,645 Incremental morbidity Episodes: 25,446 Economic Cost: US\$7 million

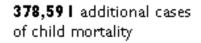
#### UGANDA

Underweight children: 975,000 Incremental morbidity Episodes: 1.3 million Economic Cost: US\$259 million



# Incremental child mortality associated to underweight children





110,220 additional cases

of child mortality

II percent of child deaths associated with undernutrition

**ETHIOPIA** 

28 percent of child deaths associated with undernutrition

**SWAZILAND** 

1.351 additional cases of child mortality 8 percent of child deaths associated with undernutrition

UGANDA

15 percent of child deaths associated with undernutrition

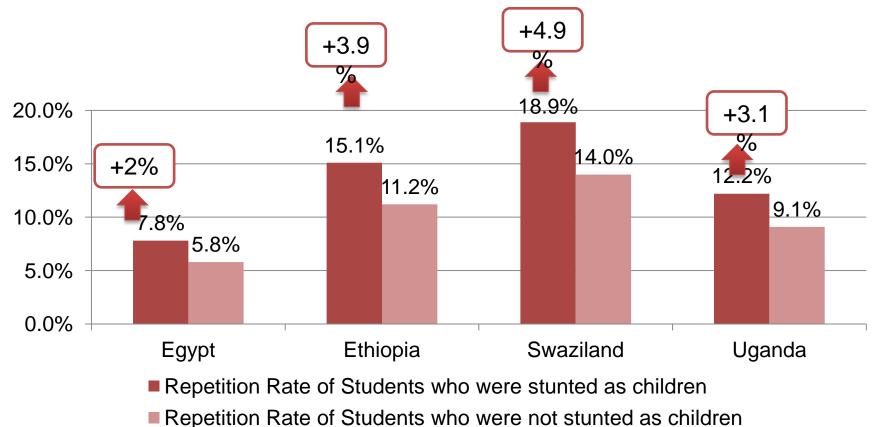
28,102 additional cases of child mortality



An child who is undernourished, is at risk of suffering from cognitive and physical impairment, which impacts the quality of life as an child and an adult within the society. Stunted children are more likely to repeat grades in school or even drop out.

## Effects on **EDUCATION** Results from 4 Pilot Countries

## Difference in Repetition Rates in School for stunted children

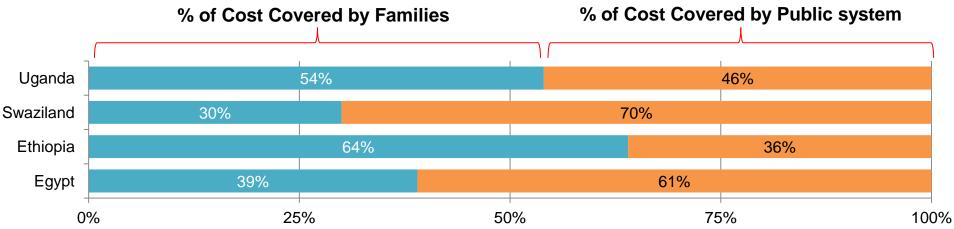


The higher risk of stunted children on repeating grades resulted in incremental grade repetition rates that ranged from 2% to 4.9% more than non-stunted children

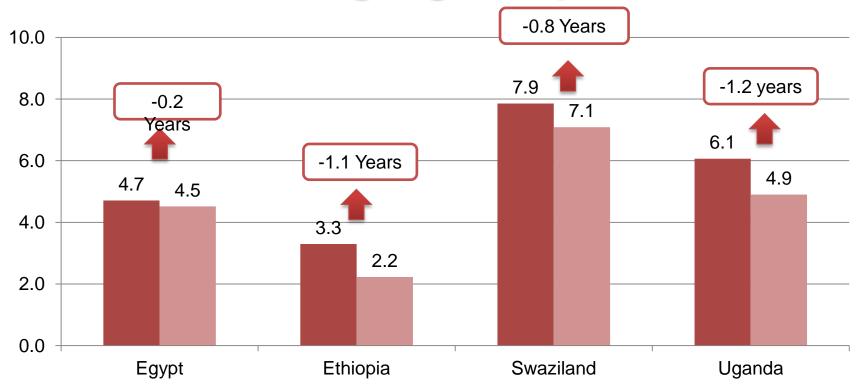
# Economic Cost of Grade Repetition of Stunted Children

Pilot Country	Stunted School-age	Total Reported	% of Repetitions Associated	Number of Repetitions associated	% of Repetition in	Economic Cost	
Pilot Country	Population (5-18 years)	Grade Repetition (2009)	with stunting	with stunting (2009)	Primary Education	Local Currency	USD (in millions)
Egypt	7.9 million	830,603	9.6%	79,391	59%	EGP 271 million	49
Ethiopia	17.5 million	963,599	16%	152,488	100%	ETB 93 million	8
Swaziland	168 thousand	47,371	12%	5,550	86%	SZL 6 million	1
Uganda	5.8 million	1.8 Million	7.3%	133,931	96%	UGX 20 billion	9.5
Total					90%		

\* Primary education only. No data for secondary education.



# Estimations in Schooling Differential of Working Age Population



Average Schooling of Non-Stunted Population Average Schooling of Stunted Population Source: UNECA, based on the official household surveys in each country.

Note: Schooling achievement based on information of head of household. It does not represent the schooling level of the population.

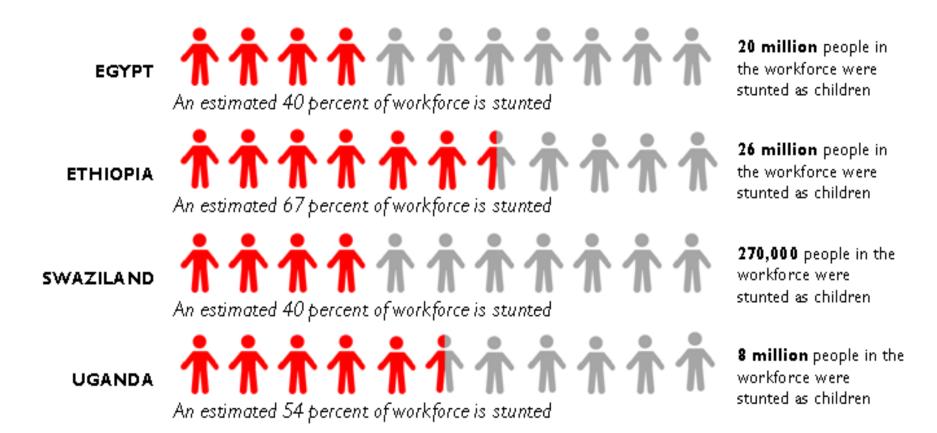
The higher risk of stunted children on dropping out of school resulted in lower schooling of the stunted population that ranged from -0.2 to -1.2 years



Theory indicates that when a child is stunted, this will impact them when they enter the labour force. On the whole, stunted workers are less productive than nonstunted workers, and are less able to contribute to the national economy.

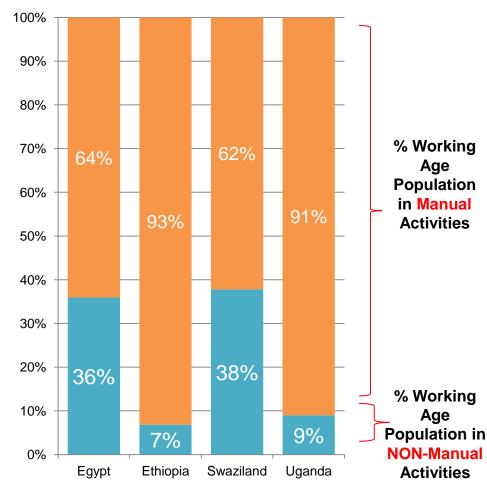
## Effects on **PRODUCTIVITY** Results from 4 Pilot Countries

## Impact of Child Undernutrition in Working Age Population

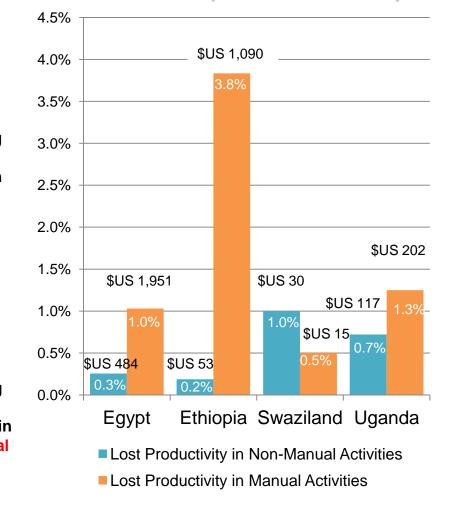


## Economic Impact of Child Undernutrition in Productivity of Working Age Population

## Distribution of Manual and Non-Manual Labour

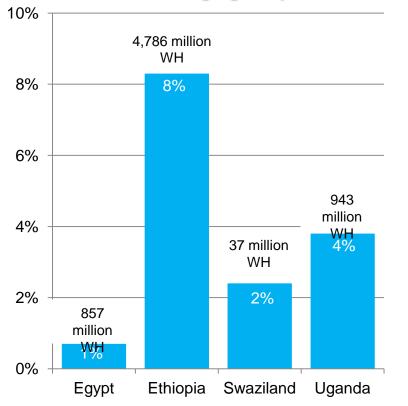


## Losses in Productivity by type of Labour (in millions of \$US)

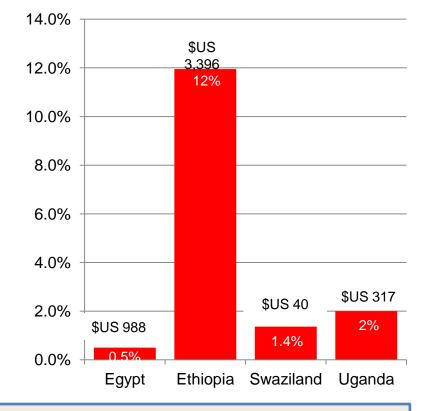


# Impact of child mortality on working age population

#### Working Hours Lost as % of Working Age Population

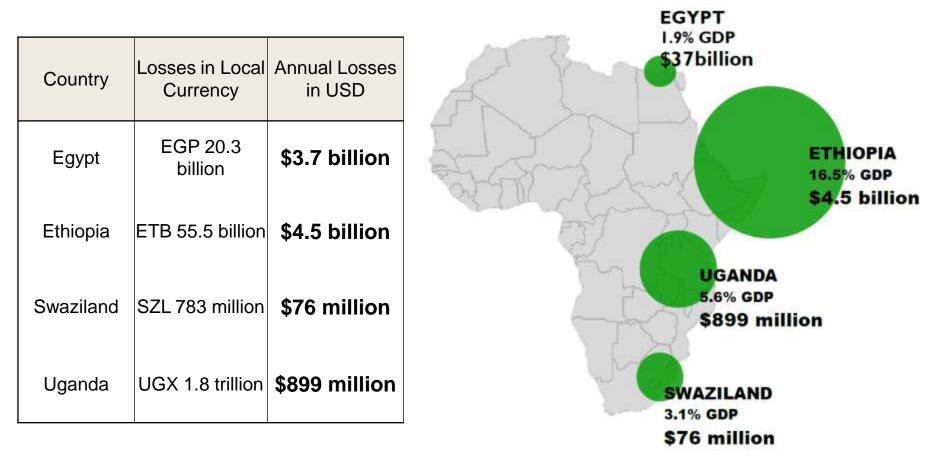


### Economic Value of WH lost as % of GDP (in millions of \$US)

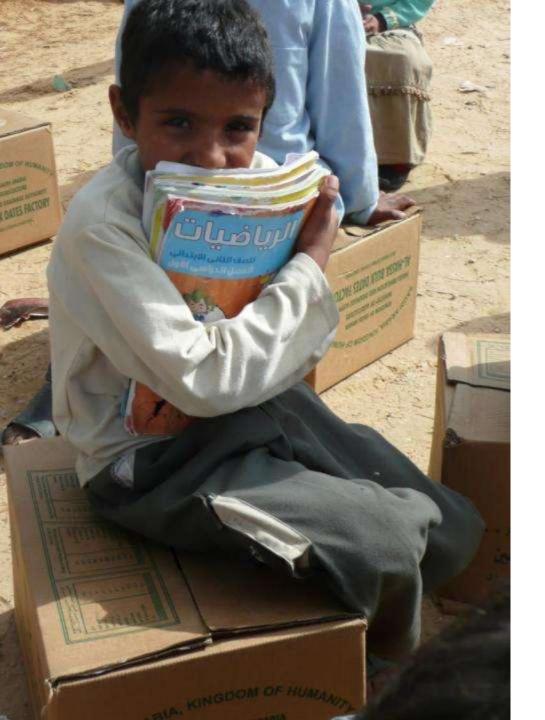


The impact of undernutrition on child mortality rates increases in countries with higher prevalence. A percentage of the WAP is absent from the economy due to incremental risk associated to undernutrition

# Economic Impact of Child Undernutrition



The aggregate cost estimation for Health, Education and Productivity are equivalent to between **1.9% to 16.5% of GDP** 



What are the potential savings of a reduction in child stunting prevalence?

# **Summary of Savings Scenarios**

	Average Annual Savings			
Country	Scenario #1:Halving the Prevalence of Child Undernutrition by 2025	Scenario #2.The 'Goal' Scenario:"10 % Stunting and 5% Underweight by 2025"		
Egypt	US\$133 million	US\$165 million		
Ethiopia	US\$376 million	US\$784 million		
Swaziland	US\$3 million	US\$4 million		
Uganda	US\$86 million	US\$128 million		

Note: All estimations are based on the period from 2009 to 2025.

# 10 Things we should know about child nutrition in Africa\*

1	<ul> <li>Today, there are more stunted children in Africa than 30 years ago</li> </ul>			
2	<ul> <li>61 to 82 percent of all cases of child undernutrition go untreated</li> </ul>			
3	<ul> <li>Most of the health costs associated with undernutrition occur before the child turns one year old</li> </ul>			
4	<ul> <li>Between 7 to 16 percent of repetitions in school are associated with stunting</li> </ul>			
5	<ul> <li>Stunted children achieve 0.2 to 1.2 years less in school education</li> </ul>			
6	<ul> <li>8 to 28 percent of all child mortality in Africa is associated with undernutrition</li> </ul>			
7	<ul> <li>Child mortality associated with undernutrition has reduced Africa's workforce by 1 to 8 percent</li> </ul>			
8	<ul> <li>40 to 67 percent of the adult population in Africa suffered from stunting as children</li> </ul>			
9	<ul> <li>The annual costs associated with child undernutrition reach values equivalent to 1.9 to 16.5 percent of GDP</li> </ul>			
10	<ul> <li>Addressing stunting in Africa is a necessary step its social and economic transformation</li> </ul>			

# **Policy Recommendations**

#### Stunting is a useful indicator of effective social policies

- Chronic child undernutrition can no longer be considered a sectoral issue, as both its causes and solutions are linked to social policies across numerous sectors. As such, stunting reduction will require interventions from the health, education, social protection, and social infrastructure perspectives. Stunting can be an effective indicator of success in larger social programmes.
- This study encourages countries not to be content with "acceptable" levels of stunting; equal opportunity should be the aspiration of the continent. In this sense, it is recommended that aggressive targets are set in Africa for the reduction of stunting that go beyond proportional reduction, to establish an absolute value as the goal for the region at 10 percent.

#### A multi-causal problem requires a multi-sectoral response

• The achievement of this aggressive goal cannot be reached from just the health sector. To have a decisive impact on improving child nutrition, a comprehensive multi-sectoral policy must be put in place, with strong political commitment and allocation of adequate resources for its implementation.

#### Sustainability requires strong national capacity

• To ensure sustainability of these actions, whenever possible, the role of international aid must be complementary to nationally led investments, and further efforts have to be made in ensuring the strengthening of national capacity to address child undernutrition.

#### Monitoring is needed for progress

- •To measure short-term results in the prevention of stunting, a more systematic approach with shorter periodicity is recommended, such as two years between each assessment. As the focus on the prevention of child undernutrition should target children before two years of age, these results will provide information to policy makers and practitioners on the results being achieved in the implementation of social protection and nutrition programmes.
- The assessment of child nutrition also includes information that relates the nutritional status of the children to the livelihoods and economic activities of the households. This information can be used to inform programme design to ensure that interventions effectively reach these vulnerable families with appropriate incentives and innovative approaches within social protection schemes.

#### Long-term commitment is necessary to achieve results

• The COHA initiative represents a valuable opportunity to place nutrition within the strategy for ensuring Africa's sustainable development. As the post-MDG agenda nears, priorities and targets will be set that will serve as a guide for development policies in years to come. It is recommended that the prioritization of the elimination of stunting be not only presented from the traditional forums, but also included in the discussions of a wider sector of development, as a concern for the economic transformation of Africa. "Child hunger is a moral issue. But as this study demonstrates, it is also a critical economic concern. These findings amount to nothing short of call to action. I hope that governments, national leaders and all interested parties will heed its warning, and push forcefully for increased and sustained allocations to fight hunger and

As they do so, I will also ational community to step part as well." Ban Ki-Moon Secretary-General of United Nations Panama City. June 2007

# **Opportunities of this Study**

- Position Child Undernutrition in the Centre of the Economic and Social Development agenda in Africa
  - Stunting as a priority for Development
- Engage this issue as a key element of the Post-MDG agenda
  - Africa can set a target that evidences technical and political commitment
- Partner and Donor support

- Special funds directed at nutrition interventions