



## A Country-Led Food and Nutrition Security Initiative: Impacts and Costs

### Impacts on Poverty Reduction and Undernutrition

In agreeing a new food and nutrition security initiative at the 2012 G8, ONE seeks a twin-track approach to reducing poverty and hunger as the 2015 MDG deadline nears. Fully financing 30 vetted country investment plans (CIPs) for agriculture and food security in IDA-only<sup>1</sup> countries could result in lifting 40-50 million people out of poverty. By substantially investing in nutrition in those CIP/IDA countries that are also aligned with the Scaling Up Nutrition (SUN) movement,<sup>2</sup> the world could reduce undernutrition in 100 million kids and save 15 million kids under 5 from stunting – as measured by low height for age. Stunting is caused by chronic malnutrition and results in irreversible physical and developmental damage that limits productivity and life expectancy.<sup>3</sup>

	People Lifted from Poverty	Kids reached with nutrition package	Kids prevented from stunting
<b>Global</b>	40-50 million	100 million	15 million
<b>Africa</b>	31 million	80 million	12 million

### Which countries are included in the impacts and costs?

IDA/CIP and SUN			IDA/CIP only	
Bangladesh	Malawi	Rwanda	Bhutan	Kenya
Benin	Mali	Senegal	Cambodia	Liberia
Burkina	Mozambique	Sierra Leone	Cape Verde	Moldova
Ethiopia	Nepal	Tanzania	Guinea Bissau	Mongolia
Gambia	Niger	Uganda	Haiti	Tajikistan
Ghana	Nigeria	Zambia	Honduras	Togo

### Which agriculture country investment plans will have the most impact on poverty?

1. Bangladesh (3.7m)
2. Ethiopia (3.1m)
3. Tanzania (2.2m)
4. Niger (2.0m)
5. Mozambique (1.8m)

<sup>1</sup>IDA eligible countries are those countries eligible to receive concessional loans from the World Bank's International Development Association at no or low repayment rates are those with a gross national income per capita less than \$1,175 in 2012. IDA also supports some countries, including some small island economies that are above the threshold but lack the creditworthiness to borrow from other arms of the World Bank.

<sup>2</sup>SUN is a global movement to "scale-up" nutrition. It came out of the United Nations in the wake of the 2007-08 food price crisis, when advocates drew international attention to food insecurity, agriculture, and the nutritional status of children. It has been gaining momentum since, manifesting itself as 1000 Days in the US and in Nutrition Action Plans (NAPs) formulated by countries that endorse the movement. Currently, 26 countries have endorsed the SUN movement, many of them "high-burden" countries.

<sup>3</sup>This is known as stunting and is tracked by the height-for-age measurement in children under 5. Stunting leads to reduced capacity for learning, reduced organ function, reduced productivity, and often premature death.



## **Which countries could see the greatest reduction in stunted children?**

1. Nigeria (4.4m)
2. Ethiopia (2.4m)
3. Bangladesh (2.2m)
4. Tanzania (1.7m)
5. Uganda (0.9m)

## **How Much Does Achieving this Impact Cost?**

Fully financing 30 agricultural country investment plans of IDA-only countries costs an estimated \$50-60 billion. To achieve the nutrition outcomes listed above, ONE estimates the world will need to invest \$6.9 billion in the 18 SUN countries found among the 30 IDA-only countries with agriculture CIPs.

## **How Will the CIPs be Financed?**

All CIPs are expected to be financed through a combination of contributions from donors, national governments, the private sector, and in some cases non-governmental organizations. Most of the CIPs reviewed are 5 to 6 years in length and the average financing gap – as identified in the plans – is around 50%, or about \$27 billion for the 30 plans. ONE recommends that the financing gaps for the CIPs are split evenly between donors and national governments, with a more modest, very important, role for the private sector.<sup>4</sup> Costs for nutrition outcomes total \$6.9 billion, and should be split evenly between donors and national governments, with a 7% (\$0.5 billion) investment in fortification by the private sector.<sup>5</sup>

## **Would These Plans Make Up the Entire Food and Nutrition Security Initiative?**

No. Countries without vetted CIPs will also be beneficiaries of a new food and nutrition security initiative. However, by prioritizing poor countries with vetted CIPs and those that also have endorsed nutrition plans, donors will be following through on the first Rome Principle of country ownership. Donors should also provide capacity building so that other poor countries can inclusively and responsibly formulate their own national agricultural investment plans and nutrition action plans.

## **Why Focus on Country Ownership?**

As part of the L'Aquila Food Security Initiative agreed at the 2009 G8 Summit, all 40 signatories adopted the Rome Principles on Global Food Security. The first principle for delivering effective aid for agricultural development and food security is a commitment to invest in country-led plans. Local knowledge and solutions are exceptionally important for making smart agriculture and food security decisions. Soils, climates, resources and capacities vary so incredibly that no one-size-fits-all would be effective in reducing poverty.

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<sup>4</sup> This suggested split reflects the expected contributions from donors, governments and the private sector identified in country plans where available.

<sup>5</sup> Based on the package of Phase 1 interventions in the World Bank Report "Scaling Up Nutrition: What Will it Cost?" the private sector share is estimated at 7% for iron fortification and salt iodization; ONE recommends a 50/50 split for the remainder.



## When Would We See These Outcomes?

If fully financed by 2015, these poverty and nutrition outcomes should materialize within the next decade. However, the time it takes for poverty reduction impacts to accrue will vary from country to country depending on the swiftness and types of investments in which financing is delivered. By illustration, some donors have significant lags between the allocation of funding and the actual implementation of projects. Using the Global Agriculture and Food Security Program (GAFSP) as a channel could speed up implementation substantially.

The impacts of nutrition interventions are easier to measure and quicker to accrue. After 3 years of sustained delivery to the vast majority of a child population, national stunting rates should drop by 1/5 to 1/3. A child can be counted as one of the 100 million “kids reached” as soon as a nutrition program reaches him or her for the first time. The time it takes to reach 100 million kids depends on the speed that donors and national governments scale-up their coverage.

## How Did ONE Develop These Targets?

To determine how many people could be lifted out of poverty, ONE divided the estimated cost of each of the 30 vetted CIPs by the estimated amount of money needed to lift one person out of poverty through investments in agriculture, or \$1363. ONE calculated the amount of money needed to lift one person out of poverty by drawing extensively on an econometric analysis performed by the International Food Policy Research Institute:<sup>6</sup>

- (1) The IFPRI analysis calculated the annual public spending on agriculture necessary for each of 30 countries to reach MDG 1, starting in 2004. Twelve of these countries now have Country Investment Plans so, for each of these 12 countries, ONE totaled the amount of money needed to reach MDG 1a between 2004 and 2015.
- (2) ONE then, for each country, divided the total cost of reaching MDG 1a by the number of people who would no longer be poor in 2015 if MDG 1a were reached (see below). This yielded a unit cost for poverty reduction through agricultural growth for each country.
- (3) ONE then averaged these 12 unit costs to yield \$1363 as the cost of lifting one person out of poverty through agricultural growth.

ONE calculated the number of people in each country who would no longer be poor in 2015 if MDG 1a were reached (#2, above) by:

- (1) Multiplying the projected populations of each country in 2015<sup>7</sup> by the percent of people in poverty if MDG 1a were reached in 2015
- (2) Multiplying the projected population in 2015 by the percent of people living in poverty in 2004.

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<sup>6</sup> Fan, Shenggen, Johnson, Michael, Saurkar, Anuia, and Makombe, Tsitsi. “Investing in African Agriculture to Halve Poverty by 2015”, ReSAKSS Working Paper No. 25, Washington, DC: International Food Policy Research Institute, 2009.

<sup>7</sup> FAO-STAT, UN World Population Prospects: The 2010 Revision from the UN Population Division. In cases where the poverty rate in 2004 was not directly observed in the Index, average annual change in percentage points based on known prevalence rates from 1992 through the present were used



(3) Taking the difference of these two figures.

Based on the World Bank report “Scaling Up Nutrition: What Will it Cost?”, ONE calculated the number of children that could be reached by nutrition interventions and saved from stunting. ~~by~~. The World Bank report estimates the cost of reaching the entire under-5 population of 36 high-burden countries. The entire under-5 child population of those high-burden countries is 356 million children. Using the information in this report, ONE developed its nutrition impact targets by:

- (1) Estimating the number of children under-5 in 2015 from the 18 countries with CIPS and that participate in SUN (123 million).
- (2) Estimating the number of children in those 18 countries who would be reached at 80% coverage (roughly 100 million – 98.7 million to be exact). An 80% coverage rate was chosen because, although the World Bank report estimates costs for 100% coverage, 80% is seen as a much more realistic goal.
- (3) Calculating the ~~percentage of the~~ proportion of 356 million that this figure represents (28%).
- (4) Multiplying the annual cost of reaching 356 million children with the Phase 1 package of nutrition interventions<sup>8</sup> (\$8.2 billion) by 28%. This ~~costs~~ equals \$2.3 billion, which represents the proportional annual cost for reaching 100 million children with Phase 1 nutrition interventions.
- (5) Thus, the total cost of reaching 100 million kids - or 80% of the under-5 children in the 18 countries - for 3 years is \$6.9 billion (\$2.3 billion for each of 3 years).
- (6) The World Bank report estimates that, as a result of 100% coverage, the overall stunting rates of each country will decrease by between 1/5 and 1/3. Since ONE’s proposal looks to 80% coverage, ONE chose a target roughly proportional to 80% of a decrease in stunting prevalence of 1/3 in the 18 countries.
- (7) Thus, ONE estimates that spending \$6.9 billion to reach 100 million children for three years could result in saving almost 15 million children from stunting.

### Quick Stats

For the 18 IDA/SUN Countries:

Projected under-5 population in 2015 in the 18 countries: 123.36 million

Kids reached at 80% coverage rate: 98.69 million

Decrease in stunted population if stunting rate decreases by 1/3: 17.17 million

Decrease in stunted population if stunting rate decreases by 1/5: 11.7 million

Cost per year for phase 1 in the 18 countries: \$2.3 billion

Cost for 3 years of phase 1 in the 18 countries: \$6.9 billion

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<sup>8</sup> The World Bank-recommended “Phase 1” package of interventions includes: behaviour change, the promotion of breastfeeding, nutritious eating and hygiene; micronutrient supplements; deworming; iron fortification of staple foods; salt iodization; therapeutic feeding for the severely malnourished; capacity building; and health system strengthening. This is considered by the authors of the book to be Phase 1 of Scaling Up Nutrition. Phase 2 includes all of the interventions mentioned plus complementary feeding. Complementary feeding is not included in this initiative because palatable, affordable products are not yet available in the marketplace. However, many are in development now. The WB estimates that Phase 1 differs in cost from Phase 2 by \$3.6 billion.