Ending hunger sustainably by 2025: What will it take?

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Towards a post-2015 development agenda

- Post-2015 agenda being discussed is a framework for the upcoming Sustainable Development Goals (SDGs)
- UN Secretary General’s High-Level Panel has proposed new goals and targets
- BUT, coherent narratives on food and nutrition security are lacking

SDGs must be people-focused, ambitious, pragmatic, and time-bound with clear targets
Key messages

- Successful country experiences show it is feasible to eliminate hunger sustainably by 2025

- Hunger and malnutrition persist even when rapid economic growth has occurred

- Agricultural growth, social protection, and nutrition strategies are crucial, but must be context-specific

- Better and timely measurement of hunger is needed to monitor and evaluate progress

- Country-led strategies, evidence based policymaking, and a global and inclusive partnership are needed
Definitions and state of global hunger

- **Hunger**: beyond calorie deficiency to include micronutrient deficiencies and poor nutrition outcomes

- **Elimination of hunger**: 5-8% of “residual” hunger that may be unavoidable

- **Undernourishment**: ~850 million people (2011-13)

- **Micronutrient deficiency**: Over 2 billion people (1995-2005)

- **Child undernutrition** (2012)
  - **Stunting**: 162 million
  - **Underweight**: 99 million
  - **Wasting**: 51 million

Source: WHO 2008; FAO 2013; UNICEF 2013
Successful country experiences:
Trends and strategies
Remarkable reductions in undernourishment and stunting

Prevalence of undernourishment %

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<td>China</td>
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<td>Thailand</td>
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Prevalence of stunting for children under 5 years %

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<thead>
<tr>
<th>Year</th>
<th>Brazil</th>
<th>China</th>
<th>Ghana</th>
<th>Thailand</th>
<th>Vietnam</th>
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<tr>
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<td>25</td>
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<td>1991</td>
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<tr>
<td>1992</td>
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<td>5</td>
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Source: FAO 2013; UNICEF 2013
Agriculture growth-led strategies

CHINA

- Decollectivization of agriculture
  - Introduction of Household Responsibility System for securing land rights

- Pro-market reforms and dismantling of state planning and monopolies

- Policies for human capital development and rural non-farm economic growth

- Large scale social programs incl. on nutrition, health, and family planning

- Complementary investments in education, clean water, and good sanitation

Source: von Braun et al. 2008; Fan et al. 2007; Fan 2010
Introduction of the *Doi Moi* reforms

- Decollectivization of farmland and equitable land rights
- Liberalization of agricultural marketing and trade
- Liberalization of foreign direct investment
- Sustained investment in human capital development

Large public expenditure to improve nutrition and health outcomes incl.

- Child-health and family-planning programs
- Nationwide health coverage and health subsidies to poor people
- About 25% of national health programs on nutrition

Source: Klump 2007; von Braun et al. 2008; Vandemoortele and Bird 2011
Agriculture growth-led strategies

GHANA

- Introduction of economic and agricultural reforms esp. in cocoa subsector
  - Devaluation of Ghana Cedi
  - Measures to control inflation
  - Competitive cocoa marketing
  - Gradual removal of input subsidies
  - Liberalized trade

- Other key factors
  - Political stability
  - Increased investments in infrastructure and human capital
  - Infusion of international aid to support government strategy
  - Increased inflow of remittances from diaspora

Source: Aryettey and Mckay 2007; Leturque and Waggins 2011
Reform and scale-up of social protection programs

- Consolidation of existing transfer programs into Bolsa Familia
- Integration of Bolsa Familia with policies for food and nutrition security
- Better targeting of transfers to poor and vulnerable households
- Expansion of program to cover more beneficiaries

Introduction of laws that guaranteed every citizen to social security incl. access to basic income, healthcare, & education

Large public investments in education, healthcare, clean water, and good sanitation

Source: von Braun et al. 2008; de Souza 2009; Holmes et al. 2011
Agricultural growth + social protection and nutrition strategies: THAILAND

- Market-oriented agricultural growth
  - Modernized marketing chains that connected smallholders to markets
  - Increased investments in agricultural research and extension
  - Product specialization and high diversification

- Integrated and community-based nutrition interventions
  - Nutrition programs integrated into national plan
  - Focus on underdeveloped areas and vulnerable populations
  - Clear linkages between agriculture and nutrition for sustainable impact
  - Involvement of community health volunteers for service delivery

What will it take to end undernourishment by 2025 in South Asia and Africa south of Sahara?

To end undernourishment by 2025, its prevalence needs to decline, on average, by

- 7% in South Asia
- 9% in Africa south of Sahara

Source: Own calculation based on data from FAO 2013

<table>
<thead>
<tr>
<th></th>
<th>BAU scenario (%)</th>
<th>Optimistic scenario (%)</th>
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<tr>
<td>SA</td>
<td>2</td>
<td>7</td>
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<td>SSA</td>
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What will it take to end child stunting by 2025 in South Asia and Africa south of Sahara?

Prevalence of child stunting under optimistic and business as usual (BAU) scenarios for South Asia (SA) and Africa south of Sahara (SSA), %

<table>
<thead>
<tr>
<th>Year</th>
<th>BAU scenario, SA</th>
<th>BAU scenario, SSA</th>
<th>Optimistic scenario, SA</th>
<th>Optimistic scenario, SSA</th>
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To end child stunting by 2025, its prevalence needs to decline, on average, by
- 12% in both South Asia and Africa south of Sahara

Source: Own calculation based on data from FAO 2013
Agric. growth, social protection, and nutrition strategies are crucial, but must be context-specific.
Role of agricultural growth strategies

- **Agric. growth enhances hunger reduction**
  - Increases household incomes and diversifies diets
  - Reduces food prices to benefit of poor net food buyers
  - Creates employment; stimulates rural nonfarm economy
  - Generates government revenues for social safety net programs

- **Subsectoral growth matters** *(e.g. small vs. large farms; staple vs. cash crops)*

- **Whether subsectoral growth reduces hunger depends on**
  - Its linkages with rest of economy
  - Its initial size and geographic concentration
  - Its growth potential
  - Market opportunities

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<tr>
<th>Calorie-growth elasticities, Tanzania (2000-07)</th>
<th>Calorie-growth elasticity</th>
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<tbody>
<tr>
<td>Maize</td>
<td>-1.9</td>
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<tr>
<td>Pulses &amp; oilseeds</td>
<td>-1.8</td>
</tr>
<tr>
<td>Horticulture</td>
<td>-1.0</td>
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<tr>
<td>Livestock</td>
<td>-0.7</td>
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<tr>
<td>Export crops</td>
<td>-0.8</td>
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*Source: Fan and Brzeska 2012*

*Source: Pauw and Thurlow 2010*
Role of social protection strategies

- Social safety nets promote growth by
  - Building assets and protecting them from shocks
  - Reducing inequality
  - Facilitating structural reform
  - Increasing effective allocation of resources

- Effectiveness depend on proper design and implementation

- Effective safety nets should have
  - Clear objective
  - Feasible means of targeting
  - Reliable transfer mode
  - Sound M&E system
  - Transparency

Impact of transfers relative to non-recipient households in Ecuador and Uganda

- % change in caloric acquisition
- Change in Food Consumption Score (FCS)

Source: Hoddinott et al. 2013
Note: FCS is a frequency-weighted measures of food diversity

Social safety nets quantity and quality of food available to the poor
Role of nutrition strategies

- **Improved nutrition** requires linking nutrition-specific interventions to nutrition-sensitive programs
  - Nutrition-specific interventions e.g. micronutrient supplementation
  - Nutrition sensitive programs e.g. early child development

- **Effectiveness, coverage, and scale** of nutrition-specific interventions are improved when delivered through nutrition-sensitive programs
  - Nutrition-specific interventions address immediate causes e.g. inadequate food and nutrient intake
  - Nutrition-sensitive programs address underlying causes e.g. lack of access to care resources

Source: Bhutta et al. 2013; Ruel and Alderman 2013
Better & timely measurement of hunger is needed to monitor and evaluate progress.
Urgent actions needed to improve measurement of hunger

- Undernourishment indicator too narrow—*must capture macro- and micro-nutrient intake and utilization*

- Construct of undernourishment indicator not representative—*must be methodologically sound*

- Insufficient up-to-date data—*frequent updates are crucial*

- Poor data collection infrastructure—*investment in innovative data collection tools are needed*
## Proposed measures of global hunger

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Proposed Improvements</th>
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<tbody>
<tr>
<td><strong>FAO’s Prevalence of Undernourishment</strong></td>
<td>The proportion of the population experiencing inadequate calorie intake lasting more than one year</td>
<td>- Increased use of representative household surveys</td>
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<td>- Regularly updated distribution framework of calories</td>
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<tr>
<td><strong>Dietary Diversity Indicators</strong></td>
<td>The number of individual foods or food groups consumed in a given period</td>
<td>- Computed at individual level and comparable over time and space</td>
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<tr>
<td><strong>Prevalence of Stunting</strong></td>
<td>The proportion of children under 5 who are stunted (low height-for-age)</td>
<td>- Reported yearly at national and sub-national levels</td>
</tr>
<tr>
<td><strong>Prevalence of Underweight</strong></td>
<td>The proportion of children under 5 who are underweight (low weight-for-age)</td>
<td>- Increased frequency of data collection especially in hunger hotspot areas</td>
</tr>
<tr>
<td><strong>Prevalence of Wasting</strong></td>
<td>The proportion of children under 5 who are wasted (low weight-for-height)</td>
<td>- Frequency of data collection should be determined by extent of emergency</td>
</tr>
</tbody>
</table>

Should be measured collaboratively by int’l organizations and national and regional governments
Country-led strategies, evidence-based policymaking, and a global and inclusive partnership are needed.
1. Promote country-led strategies

- Strengthen local institutions and capacity
  - E.g. IFPRI’s support to regional and country strategies (ReSAKSS and CSSPs)

- Promote policies adapted to local context
  - E.g. partial and sequenced liberalization of markets in China

- Advance bottom-up support for policies
  - E.g. Involvement of community health volunteers leading to effective delivery of nutrition interventions in Vietnam
2. Scale-up support for evidence-based policymaking

- **Promote policy experimentation**
  - Policy experiments show what works and what does not before scale up
  - Experimentation informs proper design, sequencing, and implementation of reforms
  - Proper framework for M&E and political and legal space are critical

- **Accelerate support for national statistical systems**
  - Invest in hard statistical infrastructure and human capital
  - Invest in soft statistical infrastructure e.g. ICTs to reduce cost and time to collect and share data
3. Promote a global and inclusive partnership

- **Enhance role of new players**
  - Emerging economies: by promoting South-South knowledge and technology sharing and trade
  - Private sector: by expanding public-private partnerships
  - Philanthropic organizations: by harnessing their potential

- **Global partnership must involve**
  - Clear definition of roles and responsibilities of different stakeholders
  - Frequent monitoring and evaluation of stakeholder performance for transparency and accountability