Ensuring agriculture biodiversity and nutrition remain central to addressing Millennium Dev Goal 1 on Hunger

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The MDG1c and its indicators

- Target 1C of the Millennium Development Goals seeks to halve, between 1990 and 2015, the proportion of people who suffer from hunger.
- Indicator 1: underweight for age of children under five - composite indicator.
- Indicator 2: proportion of population below minimum level of dietary energy consumption.
- These indicators are not perfect, and largely exclude the complexities of food security, hunger and undernutrition.

[Diagram showing food production, access, utilization, and stability.]
Wider MDG Agenda

- Hunger and undernutrition are inextricably linked to wider progress towards all MDG targets
- They are both cause and consequence of gains in health, income, education, gender equality and the environment
- A comprehensive approach to addressing hunger and nutrition will therefore require working on multiple fronts
- These fronts include: health interventions, social safety nets to protect people against risk and vulnerability, agriculture and education at minimum
Not all countries will meet the MDG1 hunger target by 2015

63 countries are on track to meet the MDG 1 target

Progress is insufficient to meet the MDG target in 34 countries, and 20 countries have made no progress

- **On track**: Average annual rate of reduction (AARR) in underweight prevalence is greater than or equal to 2.6 per cent, or latest available estimate of underweight prevalence estimate is less than or equal to 5 per cent, regardless of AARR
- **Insufficient progress**: AARR is between 0.6 per cent and 2.5 per cent
- **No progress**: AARR is less than or equal to 0.5 per cent
- **Data not available**

*Source: MICS, DHS and other national surveys, around 1990 to around 2008.*
Beyond the MDG1: Current State of Global Nutrition

- 200 million children are chronically undernourished
- 2 billion people have micronutrient deficiencies of Fe, VA, I + Fo
- 60% of child deaths have an underlying cause of poor nutrition
- 1 billion people are overweight or obese and many in dev world
How is this dire situation being addressed?

**Maternal Nutrition**
- Micronutrient Supplementation
- Iodized salt

**Child Nutrition**
- Treatment of acute malnutrition
- Vitamin A supplementation
- Zinc in treatment of diarrhea
- Infant and young child feeding

Critically important but has limitations
Lancet publication in 2008
Food-related interventions scaled

UNDERNUTRITION

Food-related causes

- Inadequate quantity

Disease-related causes

- Inadequate quality

hunger-driven strategy
What about the underlying determinants of undernutrition?

- Requires integration of technical and policy interventions with broader and more integral approaches

- Integration of agriculture, health, water and sanitation, infrastructure, gender, and education, WITH good governance, judicial and administrative protection
The Barriers So Far

• Tackling the determinants is not easy
• Political complexities have made nutrition an orphan
• Lack of coordination and funding
• Focus and scale-up of “stop gaps” in vertical treatment-based health programs
• Agriculture research, programs and policy have not focused on nutrition security - 
  this is a contributing factor to over simplified diets, and a lack of diet diversity globally
Food and Nutrition Systems

set of operations and processes involved in transforming raw materials into foods and transforming nutrients into health outcomes, all of which functions as a system within biophysical and sociocultural contexts.
Agricultural Biodiversity and the MDG1

- **Agricultural Biodiversity**: Pertains to the biological variety exhibited among crops and animals used for food and agriculture as well as among organisms that constitute agricultural ecosystems at ecosystem, species, and genetic levels.
- Critical as a coping mechanism against hunger.
- Provides a rich source of nutrients for improved diet diversity.
- Important for environmental sustainability and strengthening of local food systems.
- **Deriving direct benefits from agricultural biodiversity is an incentive to conserve that diversity – longer term thinking beyond the life of the MDGs.**
Neglected and Underutilized Species

- Abundant but did not make the transition into the global food system or the nutrition agenda largely
- Potentially important, but neglected by science and markets
- Nutritionally and functionally complex
Critical Gap #1: Data, evidence and operations research

• *More* timely and accurate data on hunger and nutrition, particularly shocks and vulnerabilities

• *Demonstrate*, build and establish the evidence of diet and health linkages to agriculture in diverse food systems

• *Improve* delivery science of what food system approaches are “working on the ground” and “how they are working” to advance nutrition

• *Inform* policy and practices on this evidence
Critical gap #2: Policy

- Nutrition and hunger fall within a broader mandate that includes agriculture, health, education, water and sanitation and other departments. This poses clear challenges to leadership and coordination.
- Too often, no single entity or team takes primary responsibility for working at the nexus of research, policy and program development.
- Dedicated policy and clear leadership at country level on food systems work with country level ownership – nutrition and ABD REQUIRE this expertise.
Critical Gap #3: Being proactive, not reactive

- Wasted resources, without a lens on local determinants that impact hunger and nutrition outcomes
- Approaches should be prevention-rooted, and focused on quick impact initiatives linked with long-term investments in the determinants
- Food assistance and safety nets can help build physical assets and strengthens human capital to protect livelihoods, and build resilience to shocks
With the Five Years Remaining

- Need to focus on operations and implementation of cross-sectoral strategies that include food systems integration
- Vulnerable populations should come first – young children and women, and geographically isolated
- **Global Action:** Ensure that international development initiatives incorporate nutrition linked food system approaches in food security, global health and social protection policies and programs
- **National Action:** Promote agriculture biodiversity conservation and its role in nutrition in national Nutrition and Agriculture plans and policies
- **Local Action:** Retool joint nutrition and agriculture interventions into regional and local programs, particularly in developing countries, through a food systems lens
A Food Systems Approach to achieving the MDG1 Hunger Target

• The work done so far in improving nutrition has not been adequate, globally but rapid and sustainable gains in reducing undernutrition and hunger is possible

• Supplementation, fortification, and agriculture “food production” interventions to improve malnutrition are all necessary but insufficient

• There has been a lack of focus on agricultural biodiversity and our food system as a whole

• Although requires effort and funding upfront, Food Systems Approaches holds promise for sustainability of the efforts in achieving the MDGs