Achieving Zero Hunger by 2030: What Is Needed?

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Nuclear Technology for the Sustainable Development Goals
Zero Hunger: What is the problem?

- Nearly 800 million are still hungry
- Two billion suffering from micronutrient deficiency (iron, zinc, vitamin A)
- Nearly 1 in 4 children under age five today are stunted
- 45% of deaths under age five are attributed to malnutrition
- 1.9 billion overweight, 600 million obese
- Malnutrition in all its forms represents the #1 risk factor in the global burden of disease
What are the key challenges and risk factors?

- Continued population growth → 9.5 bn + higher incomes driving a food transition
- Stress and degradation of natural resources
- Resource conflicts
- Climate change
- Rural stagnation: 3.5 bn, not shrinking, getting poorer
- Urbanization changing food access, driving food transition
- Changing food systems: longer value chains, diminished quality of diets
- Zoonotic diseases and AMRs
Why do agriculture and the rural areas remain important?

- Ending poverty: 80% of the world’s extreme poverty is in rural areas, rural share is growing
- Ending hunger: The majority of the world’s food insecure live in rural areas and grow food, but too little to feed themselves or escape poverty
- Conserving natural resources: Food and agriculture are where people and planet connect
- Combatting climate change and its impacts: 95% of INDCs in Paris Agreement include agriculture
- Building peaceful societies: Natural resource conflicts, especially over land and water; protracted crises and food insecurity, population displacement, and severe acute malnutrition
The central importance of food systems

The relationship between agriculture and food is changing:

- At global level, more than 80% of the value-addition in food takes place beyond the farm, though processing

- Food value chains are lengthening, becoming more concentrated

- In general and in the long-term, food prices declining as a share of income

- Strong exception is fruits and vegetables, which are key to dietary diversity and micronutrients essential for healthy diets

- Dietary transition is contributing to new challenges for achieving healthy diets; overweight and obesity are endemic 1.3 bn in 2005; 1.9 bn today; on trend, 3.28 bn in 2030

- Consumer choice is essential for healthy diet but food environments are weak
FAO vision for the 2030 Agenda

“LEAVE NO ONE BEHIND”

Enable Sustainable Development in Agriculture, Fisheries and Forests
Protect biodiversity, foster sustainable agriculture, promote sustainable use of natural resources

End Hunger, Malnutrition and Poverty
End hunger, all forms of malnutrition, and rural poverty; promote sustainable food and agriculture systems

Combat and Adapt to Climate Change
Adaptation and mitigation, Climate smart food and agriculture, climate change preparedness and resilience

Means of Implementation:
Finance/Investment; Trade and Market Access; Access to Technology; Capacity development

= PARTNERSHIPS

Global Reporting, Monitoring, Follow-up and Review

= ACCOUNTABILITY

COMMUNICATIONS
We can be the zero hunger generation

Zero hunger by 2030 is possible with **political will, public participation and the right combination of policies and technical and financial support:**

- We must tackle these three big problems together:
  - boosting food production but also increasing and stabilizing incomes of poor producers through combination of technical supports and social protection measures;
  - making food and agriculture systems more inclusive, productive, sustainable, nutrition-sensitive and resilient; and
  - mitigating and adapting to the impacts of climate change.

- The 2030 Agenda recognizes the interconnectedness of these issues; but policymakers are challenged to cope
Building an enabling environment for food system transformation

The SDGs call for comprehensive and holistic approaches that enable transformational change:

- Shift beyond sectoral perspectives to combinations of policies and programmes – key governance challenges
- Strong commitment to multisectoral and multistakeholder partnerships that mobilize means of implementation (access to technology and finance, capacity development, policy support)
- Vital role of UN institutions in providing norms, standards and “honest broker” functions
- Global reporting, monitoring and follow-up and review to provide essential data and facilitate shared learning across countries and regions
Nuclear Applications for Food and Agriculture Development

- To increase crop and livestock productivity with better adaptation to climate change
- To improve soil and water management
- To increase fertilizer use efficiency
- To control some key insect pests biologically
- To contribute to control of transboundary animal disease
- To improve food safety and quality by food irradiation
- To promote international food trade and market access
- To ensure food safety along the food chain
Thank you!