Food Systems for addressing the Nutrition Challenges
Sustainable food systems

- Vibrant local economy
- Socially & technologically innovative
- Environmentally sustainable
- Good health & nutrition
- Socially equitable
- Culturally appropriate

Transdisciplinary - Political economy

Inter-sessional Panel: Role of Science, Technology and Innovation in ensuring food security by 2030
Geneva, 24th January, 2017
A paradigm shift from industrial agriculture to diversified agroecological systems
What is wrong with our food systems?

**Burden of malnutrition**
- Stunting, underweight and wasting, micronutrient deficiencies, obesity & nutrition related NCDs

**Environmentally unsustainable** Biodiversity losses, water pollution, soil degradation, GHG emissions, unsustainable use of natural resources, low resilience ...

**Social inequities**
- Poverty, disempowerment ...

**Neglect of cultural values**

→ Directly associated with current food systems based on industrial agriculture
Burden of Malnutrition

- 159 million children under 5 stunted in 2015
- 41 million overweight children in the world in 2015 – an increase of about 11 million over the past 15 years.
- 50 million children under 5 wasted in 2015.
- 2 billion adults overweight or obese
- 2 billion people with micronutrient deficiencies

Food Security: Necessary but not sufficient

• Food, Health and Care are all necessary for nutrition security.
• Multi-sectoral action with nutrition-specific and nutrition-sensitive interventions. Increasingly being pursued in countries.
What prevents change: 8 Lock-ins

- Export Orientation
- Expectation of Cheap Food
- Path Dependency
- Concentration of Power
- Measures of Success
- Feed the World Narratives
- Compartmentalized Thinking
- Short-term Thinking
Changing the paradigm

1. Develop new indicators for sustainable food systems.

2. Shift public support towards diversified agroecological production systems.


4. Use public procurement to support local agroecological produce.

5. Strengthen movements that unify diverse constituencies around agroecology.

6. Mainstream agroecology and holistic food systems approach into education & research agendas.

7. Develop food planning processes and joined-up ‘food policies’ at all levels.

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Social and Technological Innovations

• Many innovations- at what scale and for who?
• Examples of innovations around food supplements for young children, therapeutic products etc.
• Lots of other stuff but for which markets?
Social and Technological Innovations (cont’d)

- AFSA documented case studies on health and nutrition e.g. orange fleshe potatoes (Ghana), green leafy vegetables (Kenya), permaculture (Malawi) crop intensification (Ethiopia) etc.

- Processes that embrace diversity of knowledge

- Scale and context-specific programming
Health and Nutrition Apps. examples

- RapidPro for nutrition: M & E for prevention & treatment of malnutrition.
- Anthrowatch: on-going monitoring tool in food insecure areas.
- mHealth: information and services for pregnant women.

How do we get more of these e.g. for enabling shifts to consumption of healthy and nutritious diets everywhere?
Key messages

• There is progress, albeit uneven, in reducing malnutrition but it remains pervasive. Nutrition-sensitive agriculture and food systems should contribute to addressing this challenge.

• Transformation of food systems is critical to ensuring diversified and healthy diets for all, a necessary condition for attaining nutrition security.

• New way of thinking needed at multiple levels as tweaking practices can improve some of the specific outcomes, but will not provide long-term solutions to the multiple problems.
Key messages (cont’d)

• Change is already happening and a series of modest steps can collectively shift the centre of gravity in food systems.

• Given the nature of the nutrition problem, just as programming and implementation goes multi-sectoral, innovations have to do the same.