Session 2: Conceptual Framework for Food Systems and Children’s Diets
Overview

- Purpose and evolution of food systems frameworks.
- Conceptual Framework for Food Systems and Children’s Diets.
- Discussion
Why have a food systems framework?

- Provides a basic structure for focus and consensus of the system in its totality
- Takes a complex system and frames it into potentially measurable components or compartments
- Demonstrates connections and sometimes, directionality
- Lays out +/- feedback loops
Evolution / Historical Background

Older framework from the 1990s

Evolution / Historical Background

Framework that emphasizes the drivers that shape food systems in early 2000s

Evolution / Historical Background

Framework that emphasizes the environment public health relationship emerging in 2010s

Evolution / Historical Background

Framework of food environments

Figure 9. Barriers and opportunities for healthy eating. Reproduced from Afshin et al\(^9\) with permission of the publisher. Copyright © 2014, John Wiley & Sons, Ltd.

Mozafarrian Circulation 2016, Adapted from Afshin et al
Evolution / Historical Background

Source: UN High Level Panel of Experts Report on Food Systems and Nutrition 2017
Value-add and focus

- Plethora of frameworks exist that aim to conceptualize linkages between the various components of food systems, diets and nutritional status (as well as other outcomes – economic, environment, social etc).

- Most of these frameworks are not people-focused.

- No framework examines food systems’ interactions with provider behaviour and interactions with external and personal environments, and *children’s and adolescent’s diets*. 
Food systems are not static

- Frameworks don’t really show the dynamism, temporalism, or spatial nature of food systems.
- Food systems are being shifted, shaped, transformed, dismantled.
- Much of that is due to external drivers but also supply and demand input/output dynamics.
- Resiliency of systems that are “working” is pivotal.

Food Systems for Children and Adolescents

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Source:
1. HLPE. 2017.
Process

- Technical team composed of FAO, GAIN, UNICEF and Johns Hopkins University determined the focus, scope and content of the Framework.

- Two rounds of external review
  - Shared with experts on child and adolescent nutrition

- The Framework uses the nutrition and food systems framework proposed in the High-Level Panel of Experts (HLPE) Report as the basis.

- Markedly differs from the HLPE framework due to its explicit focus on children’s diets and nutrition status
Drivers of Food Systems

Demographic Drivers
1. Urbanization
2. Population growth
3. Migration and forced displacement
4. Conflicts and Humanitarian Emergencies

Political and Economic Drivers
1. Leadership
2. Subsidies
3. Trade policies
4. Land tenure

Innovation and Technological Drivers
1. Internet
2. E-Commerce
3. ICT
4. Financing and Investments

Bio-Physical and Environmental Drivers
1. Natural Resources Management
2. Climate Change
3. Ecosystem Services
4. Natural Disasters

Source:
1. HLPE. 2017.
FOOD SUPPLY CHAINS
Influencers

Inputs
Access to seeds, traditional varieties, fertilizers and extension services.

Post-harvest, processing and distribution
Aflatoxin control, fermentation, drying, fortification, product reformulation and storage and transport infrastructure (including cold chains)

Natural resources management
Soil quality, agricultural biodiversity, resilience to heat, drought, pests and diseases, water and energy use.

Agricultural research and development
Innovation, Entrepreneurship
PERSONAL FOOD ENVIRONMENTS
(Individuals and Households)
**Influencers**

**Accessibility of food**
Distance to nearby market and food outlets, daily mobility, mode of transport, space and place

**Affordability of food**
Purchasing power

**Convenience**
Relative time and effort of preparing, cooking and consuming food and time allocation
EXTERNAL FOOD ENVIRONMENTS
(Retail and commercial markets, schools, informal food vendors)
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INFLUENCERS

Availability and accessibility of food
Presence of and proximity to markets and food outlets

Price of food
Monetary value of food

Food quality and safety
Level of processing, shelf-life packaging and food composition

Marketing and regulation
Promotional information, branding, advertising, sponsorship and labelling
FOOD PROVIDER BEHAVIOUR
(Food procurer, preparer and supervisor)
Food Systems for Children and Adolescents

Influencers

Intra-household dynamics
Feeding and care practices, intra-household food distribution, and level of agency or control on household expenses

Food preparation
Culinary knowledge and skills, relative time and effort spent on cooking and preparing food; WASH practices

Desirability and acceptability of food
Preferences, tastes, desires, attitudes, culture

Socio-economic characteristics
Education and literacy

Food Provider Behaviour
(Food procurer, preparer and supervisor)
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DIET OF CHILD/ ADOLESCENT
Food Systems for Children and Adolescents

Influencers

Eating patterns
Frequency, routine, pattern and quality of dietary intake

Taste preferences
Biological and conditioned

Appetite
Physical activity, energy balance

Psycho-social factors
Ability to interpret information, concept formulation, attention span and multidimensional judgements
Discussion

- Do the elements (building blocks) of the conceptual framework sufficiently reflect the interactions between food systems and children’s diets and nutrition?

- Are the interactions universally relevant?

- Does the Framework provide useful guidance on actions that can be taken to shape food systems for healthier diets?