Food Systems for Healthier Diets
Flagship Research Programme under A4NH-CGIAR

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A4NH PHASE II RESULTS FRAMEWORK

A4NH PORTFOLIO

- Food Systems for Healthier Diets
- Biofortification / Plant Breeding for food nutrients
- Food Safety
- Supporting Policies, Programs, and Enabling Action through Research
- Agriculture – Human Diseases

Country Coordination and Engagement (CCE) Unit

Monitoring, Evaluation, and Learning (MEL) Unit

Gender, Equity, and Empowerment (GEE) Unit

IMPACT PATHWAYS AND KEY ACTORS

Agri-food Value Chains Pathway
- Producers
- Chain agents
- Consumers
- Regulators

Policies Pathway
- Policymakers and investors
- Intergovernmental agencies
- Civil society organizations and industry groups

Development Programs Pathway
- Agriculture, nutrition, and health program implementers (NGOs and governments)

GOALS

- REDUCED POVERTY
  - Improved diets for poor and vulnerable people
  - Improved food safety
  - Improved human and animal health

- IMPROVED FOOD AND NUTRITION SECURITY FOR HEALTH
  - More sustainably managed agro-ecosystems

- IMPROVED NATURAL RESOURCE SYSTEMS AND ECOSYSTEM SERVICES
  - Mitigation and adaptation achieved

- EQUITY, CAPACITY AND ENABLING ENVIRONMENT
  - Equity and inclusion achieved
  - Enabling environment improved
  - National partners and beneficiaries enabled

DEVELOPMENT OUTCOMES

- Enhanced smallholder market access
- Increased incomes and employment
- Increased productivity

Enhanced diets for poor and vulnerable people

Increased human and animal health

More sustainably managed agro-ecosystems

Mitigation and adaptation achieved

Equity and inclusion achieved

Enabling environment improved

National partners and beneficiaries enabled

Mitigation and adaptation achieved

Equity and inclusion achieved

Enabling environment improved

National partners and beneficiaries enabled
Phase I 2012-16

Accomplishments

- Biofortification: varieties, nutrition (Vit A, Fe), country teams
- Food Safety: aflatoxin control technology, informal markets
- Agriculture-nutrition pathways, ToC, evaluation evidence
- Supporting country policies and investments
### Phase I – Value Chains for Enhanced Nutrition

- Supported value chain research for nutrient-dense foods with methods, frameworks, and evaluation

### Key gaps in Phase I were:

- Weak consumption/diet quality / demand orientation
- Lack of engagement with private sector shaping food system transformation

### New flagship on Food Systems for Healthier Diets

- Not a new idea but little empirical research
- Need a broader range of technical and public-private partnership skills than ordinarily found in CGIAR Centers.
Food systems

- The **full set** of processes, activities, infrastructure and environment that encompass the production, processing, distribution, waste disposal, and food consumption.
- **Multidimensional** (sociocultural, environmental, economic and political aspects)
- **Complex**, with multiple actors (producers, food chain actors, consumers) managing multiple agri-food value chains in dynamic and interactive environments
- **Multiple impacts** (environmental, economic, social equity and nutrition/health)
Dietary transition challenge

- Focus on reducing **triple burden of malnutrition**: undernutrition, micronutrient deficiencies, overnutrition
- Consumption of a **healthy diet** for improving nutrition and health
- Present **dietary transitions** reflect increase in unhealthy and reduction of healthy components
- **Food systems** need increase impact on nutrition outcomes, in a **sustainable way**
Contribution to total dietary energy supplies (kcal)
Percentage of monetary value of food consumed from different categories

GLOPAN, 2016
Changes in dietary pattern from 1990-2010 among men and women

Greater consumption of ten healthful foods and nutrients

Lesser consumption of seven unhealthful foods and nutrients

- Low income countries had **poorer** diets based on healthy items, but **better** diets based on unhealthy items
- Both types of diets worsened in low income countries
- Middle income countries improved in healthy items but deteriorated in unhealthy items

Imamura et al, Lancet Global Health 2015
Food Systems for Healthier Diets

Main objective:
To understand how changes in food systems can lead to healthier diets and to identify and test entry points for interventions to make those changes.

- Diagnosis and foresight
- Food systems innovations
- Anchoring and scaling up
- Interdisciplinary problem analysis
- Co-innovation and lab-in-the-field experiments
- Multi-stakeholder platforms
How to measure food and nutrient intake of vulnerable populations?

• Individual data
  • 24 hour recall
    • Gold standard but hard and not routinely collected
    • Need for ‘simplification’ (INDDEEX)
  • Dietary scores
    • Dietary diversity scores (DHS): only cover (micro)nutrient adequacy
    • Main gap is appropriate healthy eating indices including both healthy and unhealthy diet components

• Household data
  • Food expenditure and consumption data (LSMS)
    • Available for many LMICs and representative nationally and sub-nationally over multiple years
    • Household level data, weakness in extrapolating to some target groups (infants)
    • With some adaptations have potential for dietary gaps and trends for most population groups
• What are entry points for food system innovations?
• Systemic elements start with diet constraints linked to
  • Supply and demand of nutritious foods (multiple value chains)
  • Interventions addressing diet constraints
  • Enabling institutional, investment and policy environments
What are the food system boundaries?

- Outcome boundary: Diet quality
- Anchor at national food systems, linking to regional and subnational systems (rural-urban linkages)
- Focus on key leverage points in the system
Lessons from the Dutch Food System Experience

• How can we influence the chain stakeholders to consider diet quality?
  • How to get the private sector involved?
Food Systems for Healthier Diets

Challenges
• Dietary Transition (balancing healthy and unhealthy) difficult
• Collaboration:
  • Public – Private
  • Longer supply chains, multiple agents
• Appropriate Enabling / Anchoring
  • Realistic in national / regional context
  • Balanced / fewer distortions
  • Evolving roles – public and private

National Food Systems
• Relevant to national culture, institutions, comparative advantage
• Shared vision and goal setting
• Elements
  • Shaped by consumption and demand
  • Dynamic and Enabled SMEs
  • Policy and Investment balance and evolution
  • Capacity of national actors