

# Food Systems for Healthier Diets

## Flagship Research Programme under A4NH-CGIAR

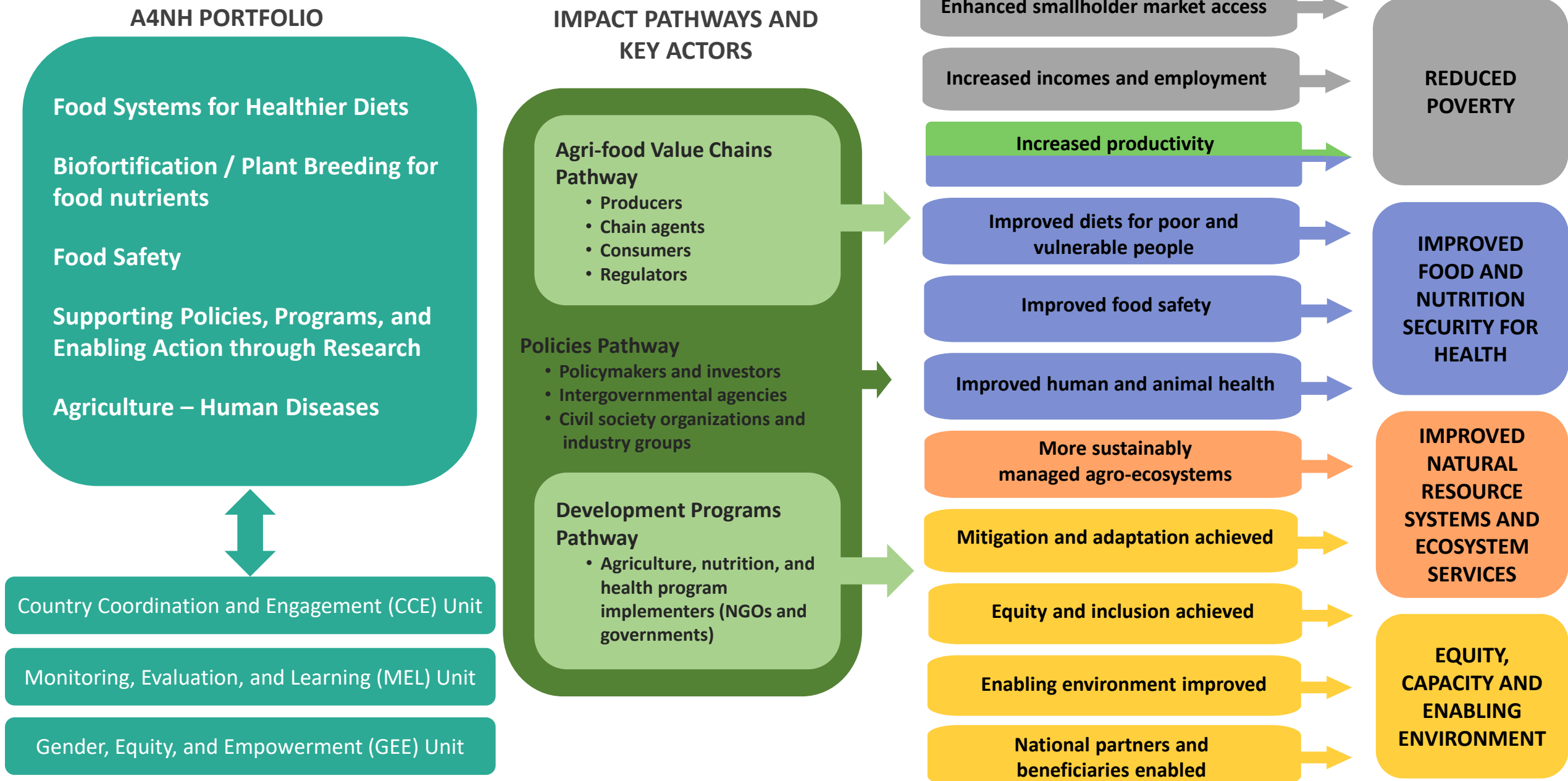
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# A4NH PHASE II RESULTS FRAMEWORK



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



# Evolution: From value chains to food systems

- **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.



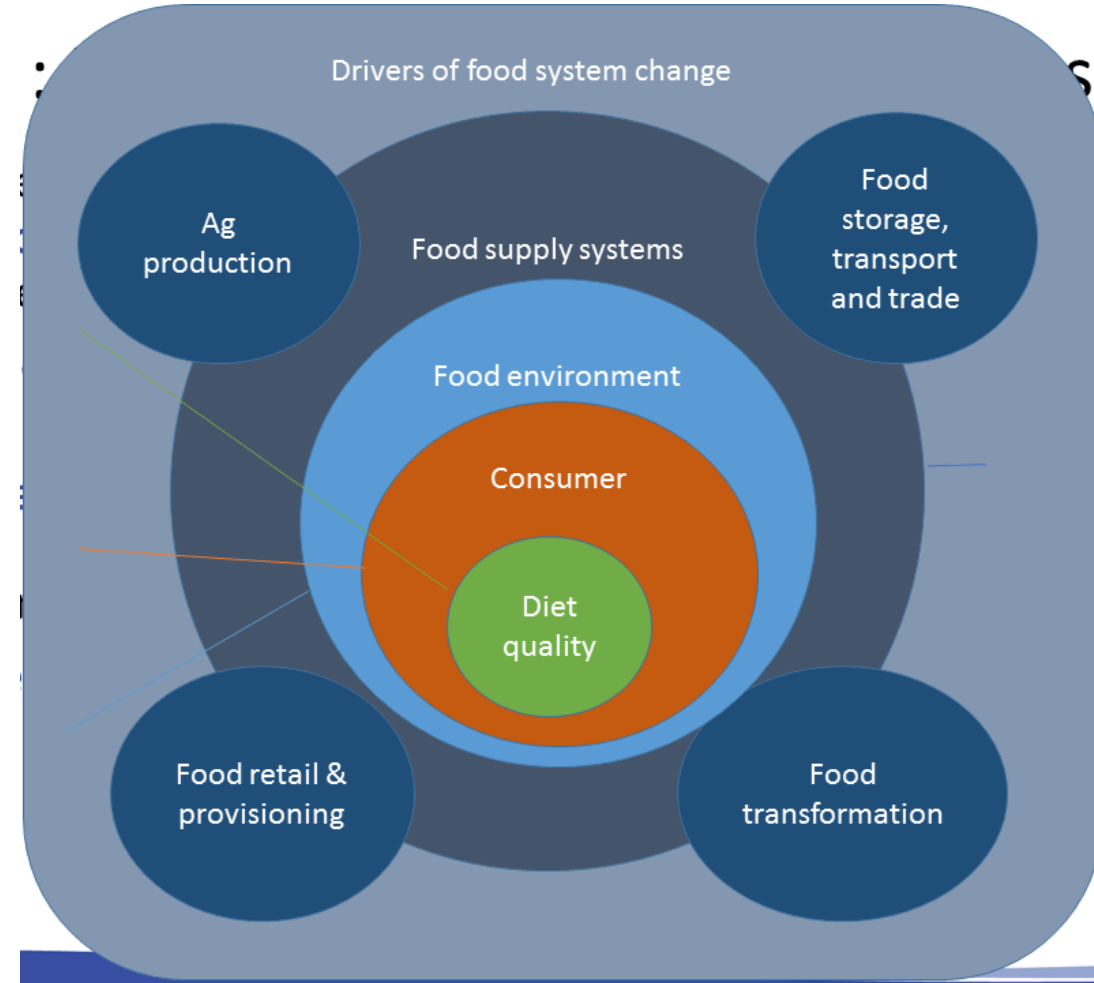
L. Sandersz / Bioversity International



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# 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)



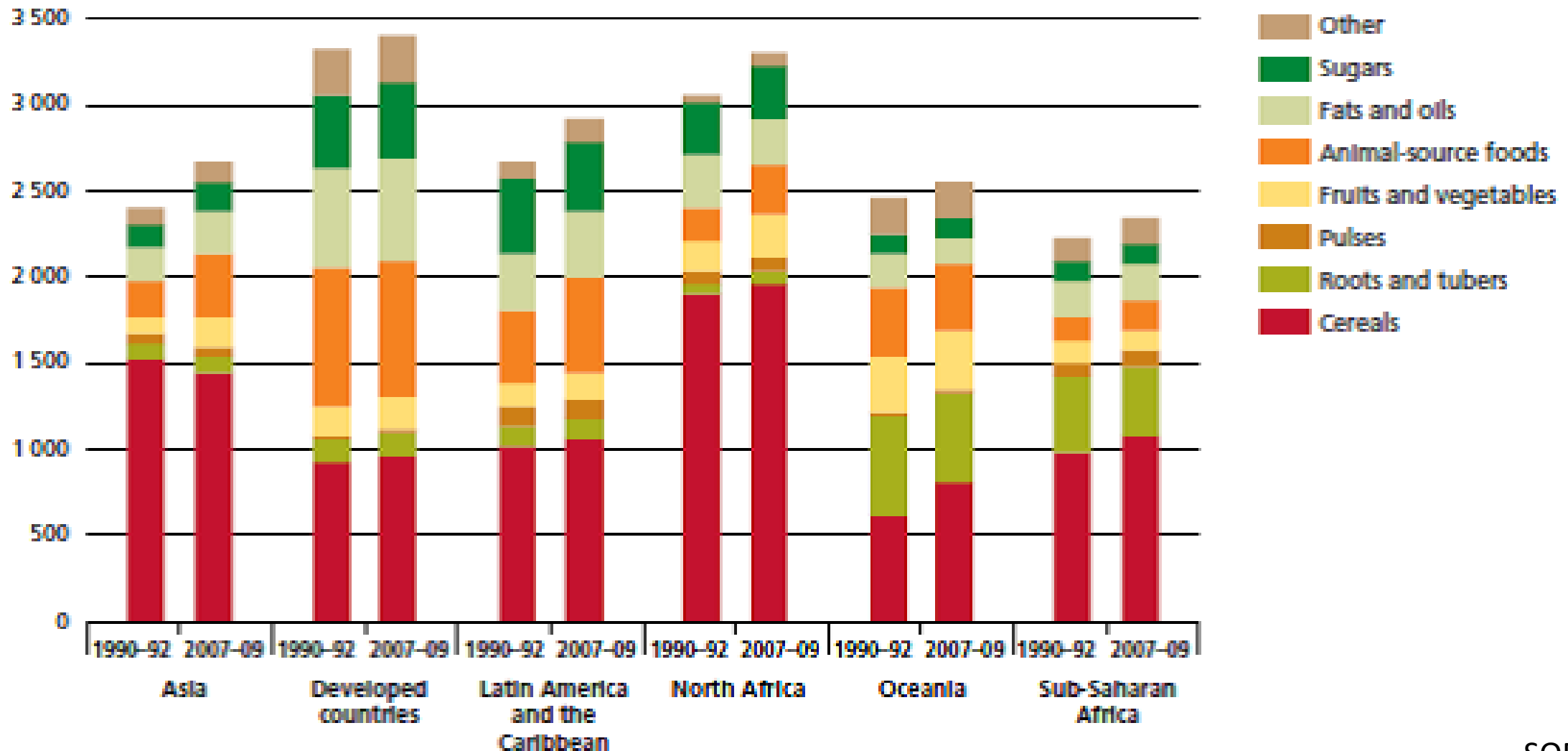


# Dietary transition challenge

- 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**

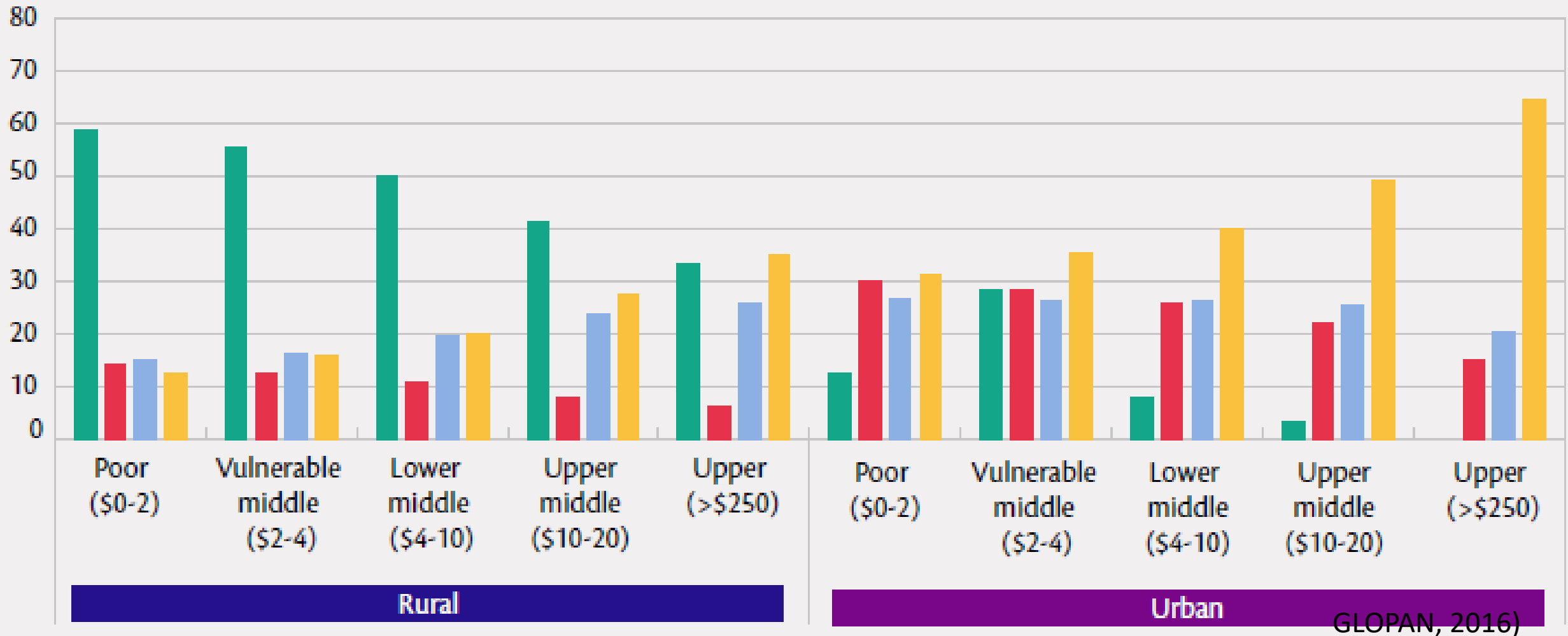


# Contribution to total dietary energy supplies (kcal)



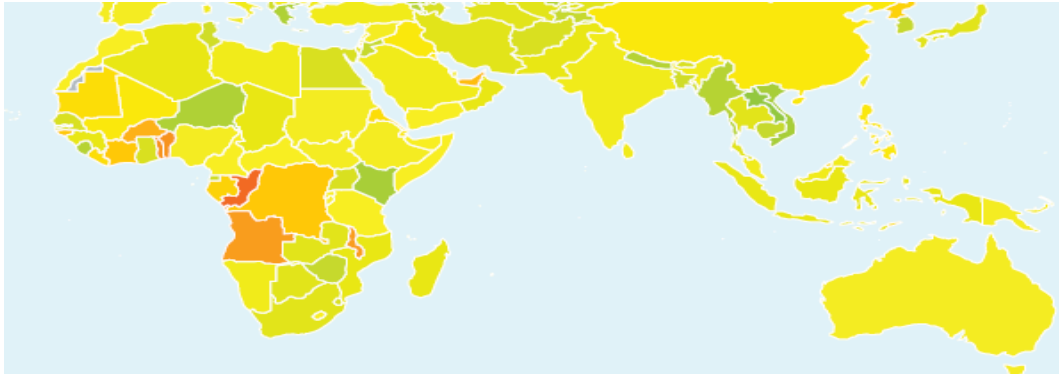
# Percentage of monetary value of food consumed from different categories

Own production Purchase: unprocessed Purchase: low processed Purchase: high processed

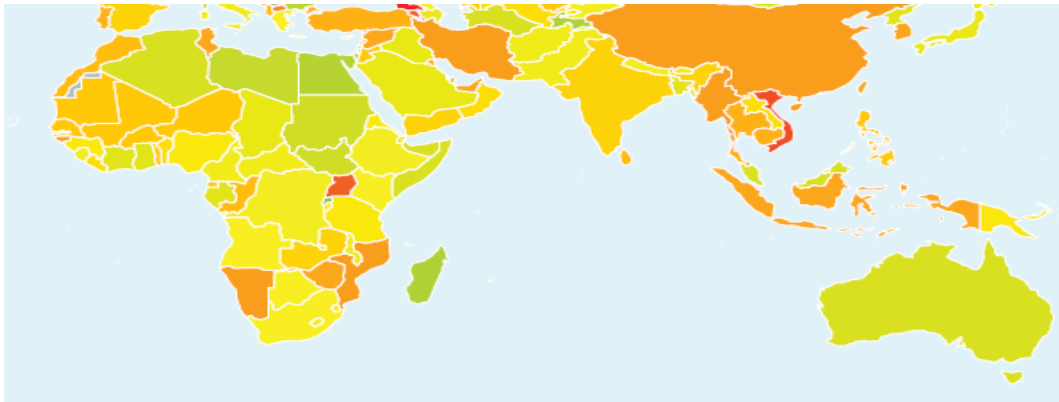




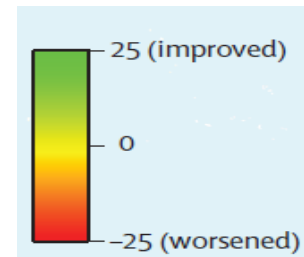
# Changes in dietary pattern from 1990-2010 among men and women



Greater consumption of ten healthful foods and nutrients



Lesser consumption of seven unhealthful foods and nutrients

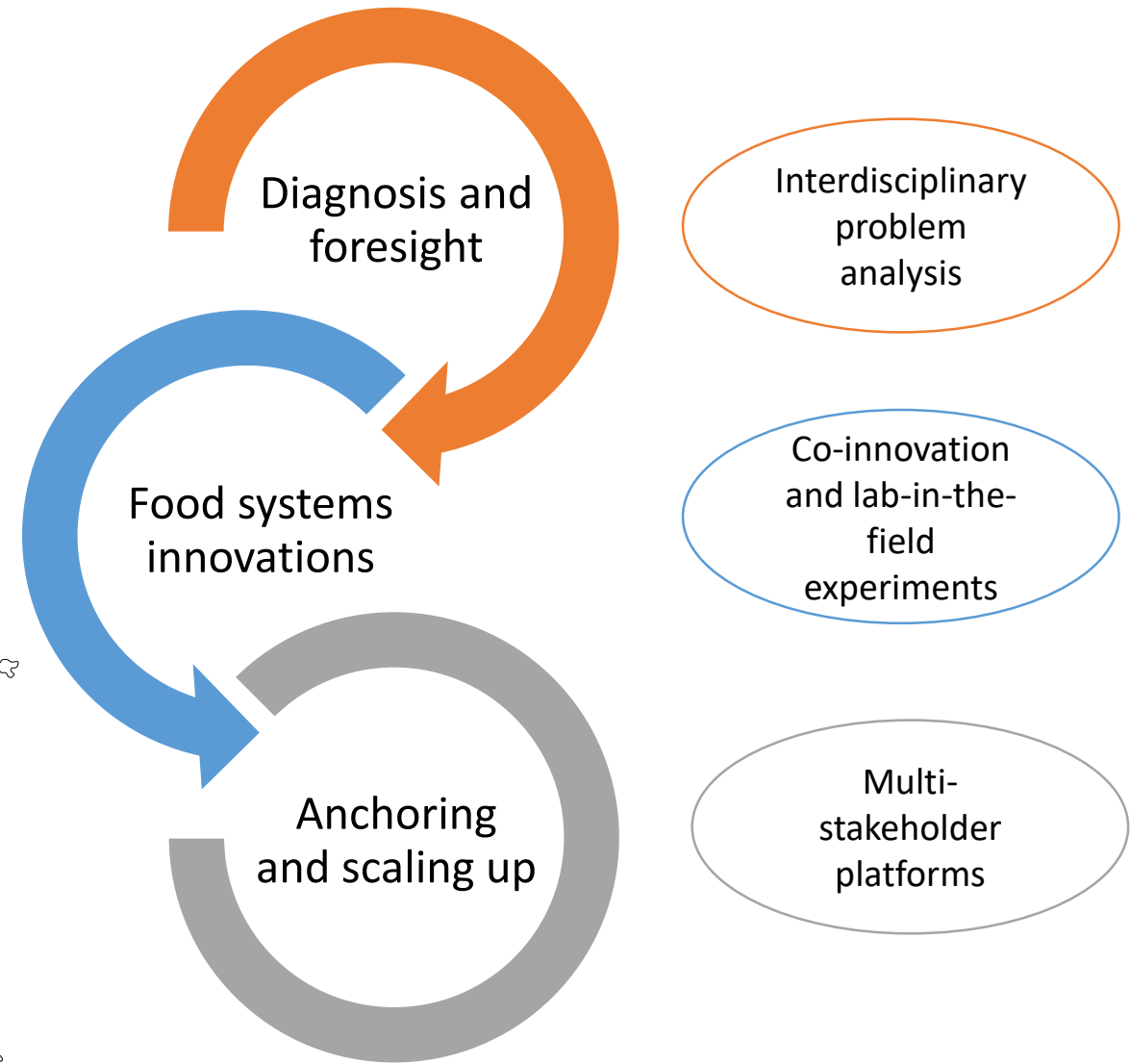
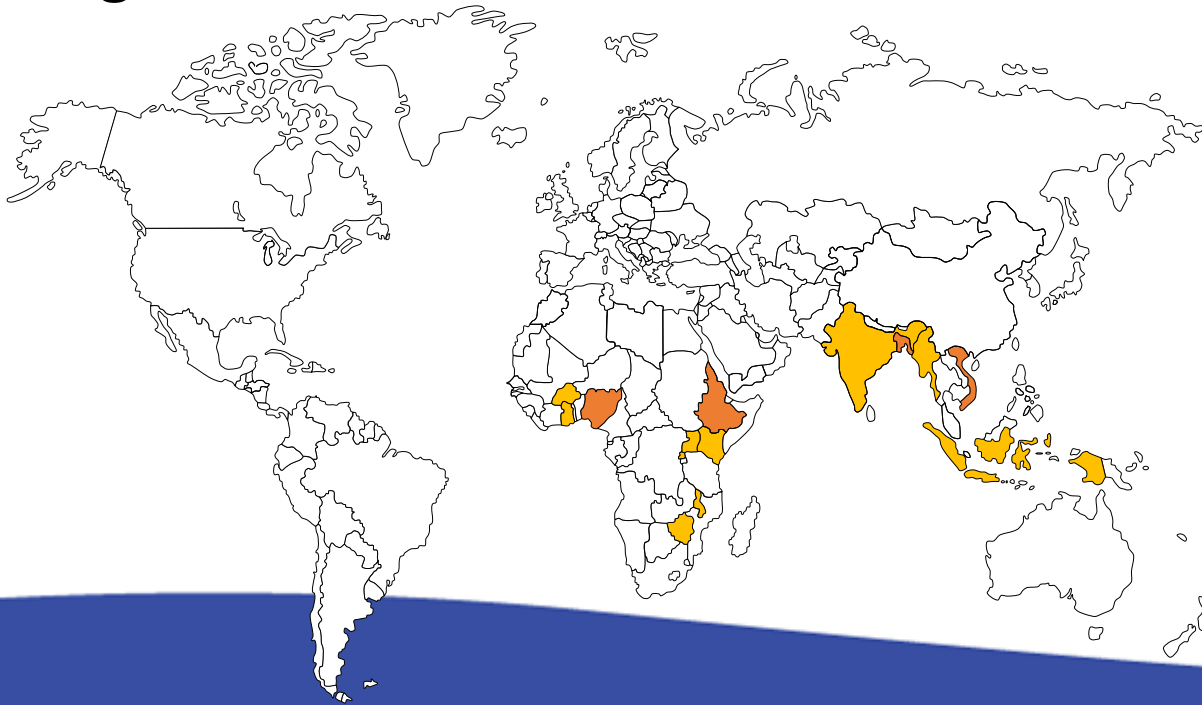


- Low income countries had **poorer** diets based on healthy items, but **better** diets based on unhealthy items
- Both types of diets worsened in low income countries
- Middle income countries improved in healthy items but deteriorated in unhealthy items

# 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



# 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' (INDDEx)

- **Dietary scores**

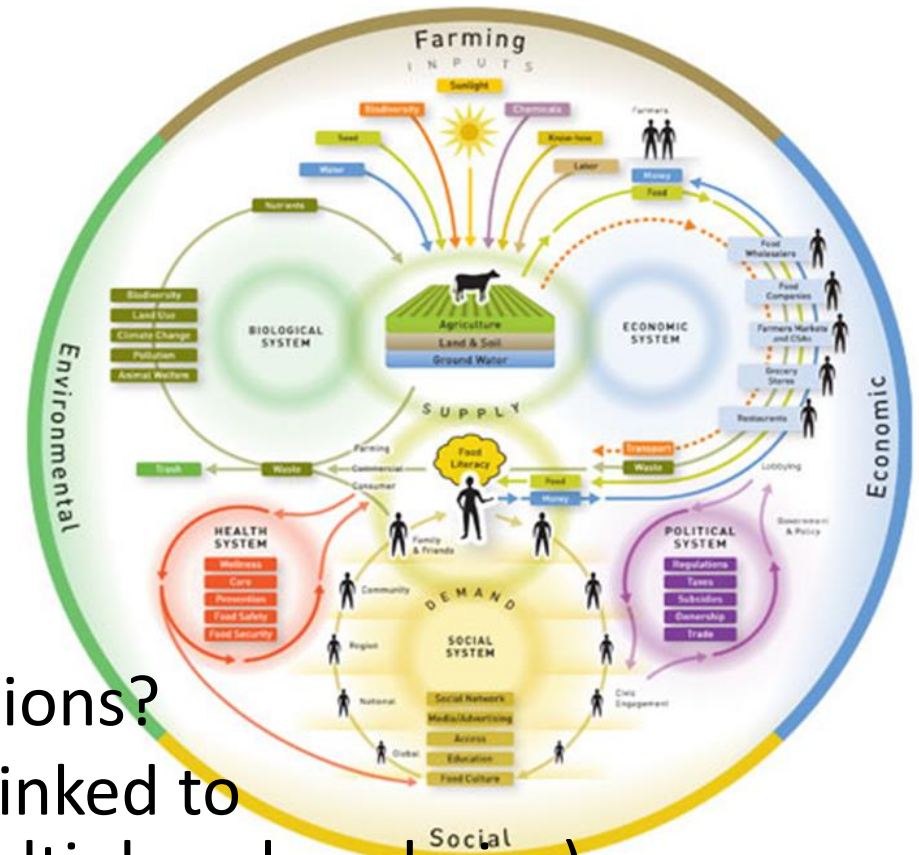
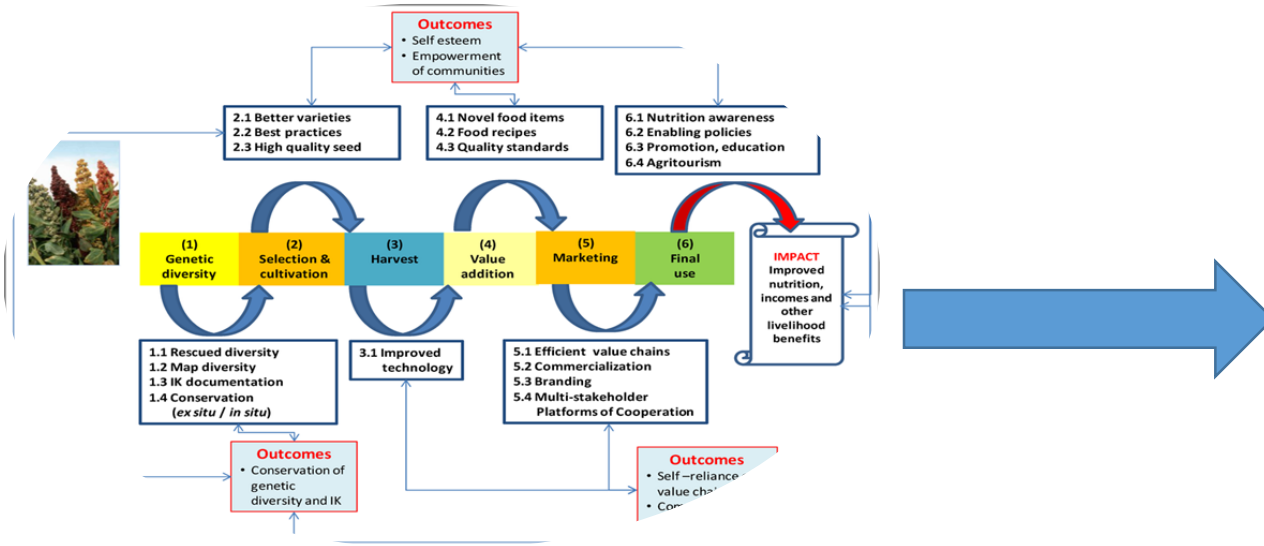
- Dietary diversity scores (DHS): only cover (micro)nutrient adequacy
    - Main gap is appropriate healthy eating indices including both healthy and unhealthy diet components

- 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

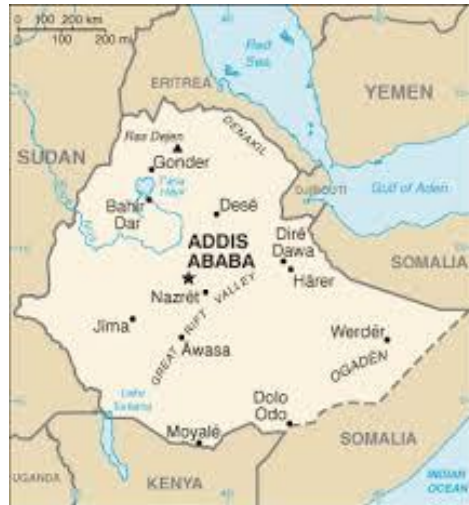
# From value chain to food system analysis



- 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

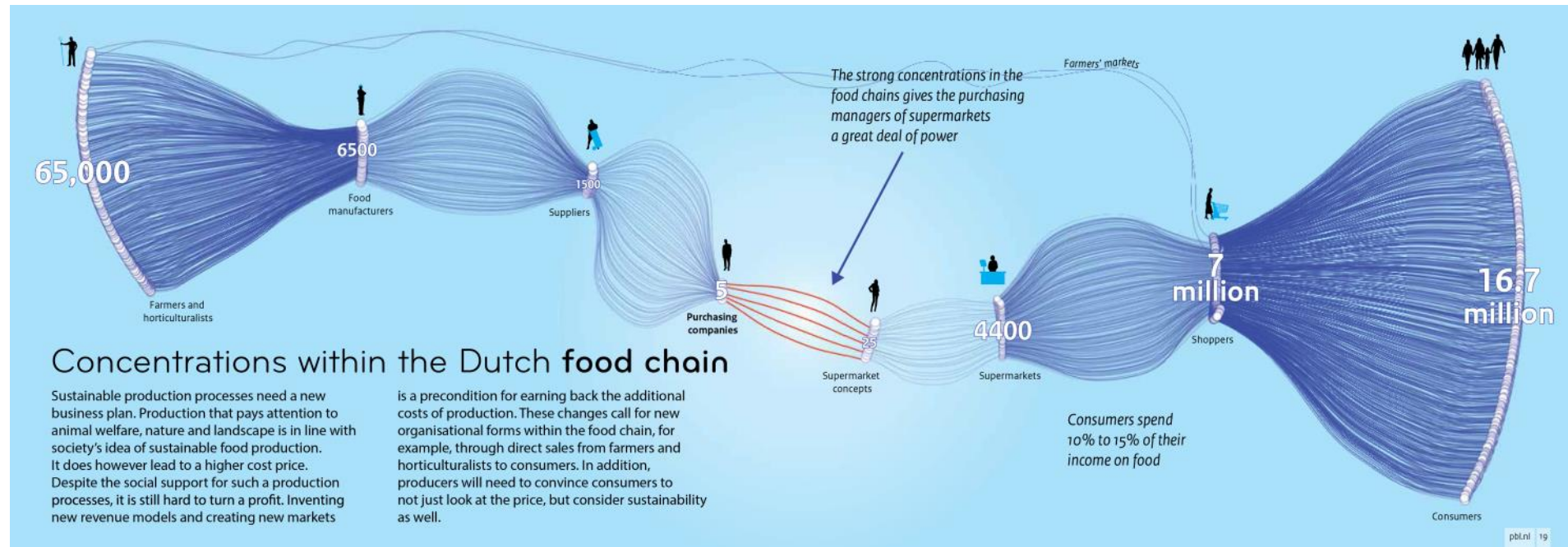
# What are the food system boundaries?

- 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

M.Hasan, c/o Photoshare

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