Learning from World Bank History: Agriculture and Food-Based Approaches for Addressing Malnutrition

Joint project by

Agriculture & Environmental Service Dept. (AES)

World Bank Group Archives

and the

SecureNutrition Knowledge Platform

Anna Herforth

March 25, 2015

SecureNutrition

linking agriculture, food security, and nutrition

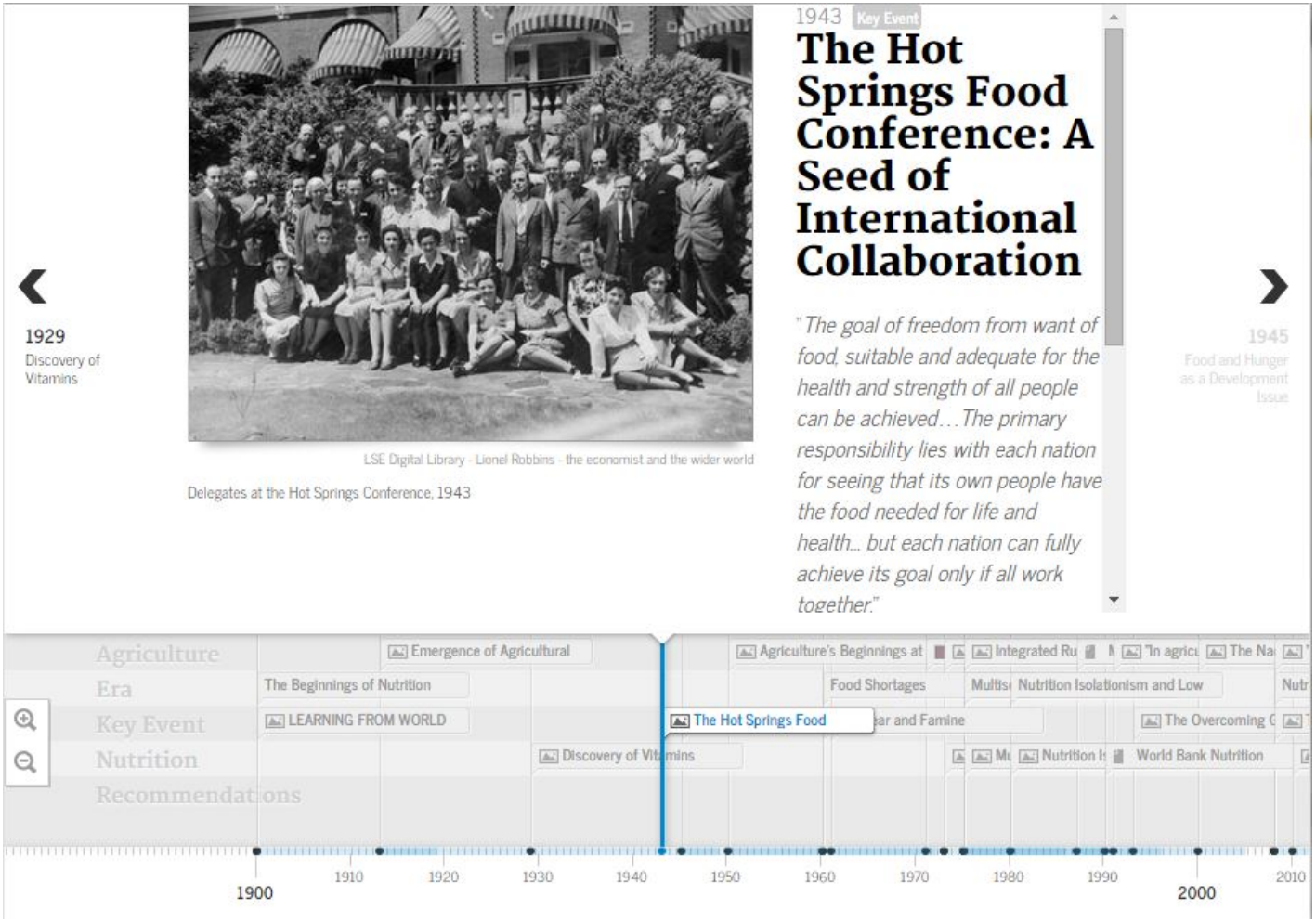
Scope of Project

- Co-author & team leader: Yurie Tanimichi Hoberg
- Output
  - Research paper
  - Interactive timeline on SecureNutrition website
- Resources
  - Historical documents from the WBG Archives including reports, meeting minutes, speeches, and oral history transcripts of retired staff
  - Technical adviser: Alan Berg
  - Personal interviews with over 20 experts
- Period covered
  - 1960s to today (more detail on 1973 and onwards)

Guiding questions of the research paper:

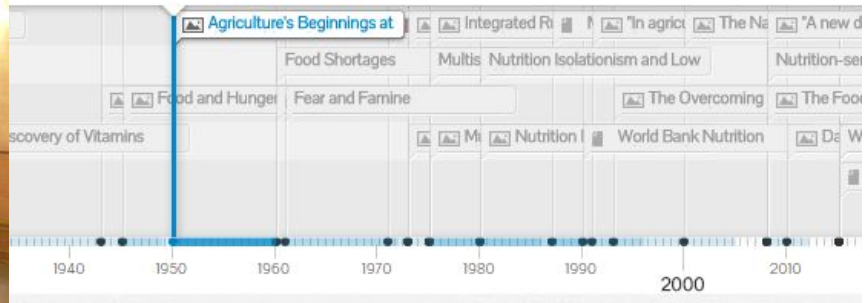
- How has the Bank (and the development community in general) addressed nutrition through agriculture in the past?
- What are the lessons for today?

This is not the first time interest has arisen



SecureNutrition
Linking agriculture, food security, and nutrition

Agriculture and nutrition did not feature highly in the World Bank initially…

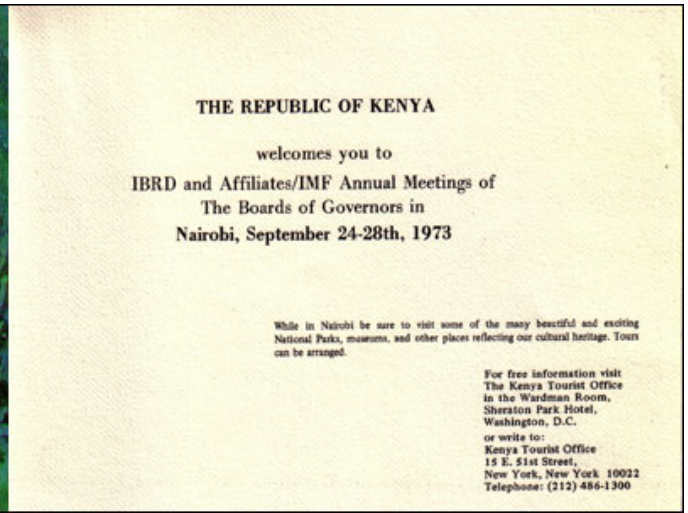


SecureNutrition
Linking agriculture, food security, and nutrition

…but were central to McNamara's vision for a World Bank focused on poverty reduction

- 1973 Nairobi speech called Bank to shift mission to poverty reduction
  - identified rural development, or increasing the productivity of small-scale farmers, as the main vehicle
  - Population control, employment, nutrition also considered

- Two years earlier:
  - *"Reducing the ravages of serious malnutrition will itself accelerate economic development and thus contribute to the amelioration of poverty. And that there are a number of practical steps that can be taken…"*



SecureNutrition
Linking agriculture, food security, and nutrition

Priorities for nutrition have shifted over time

Priorities

Example of responses

40s-60s: Vitamins

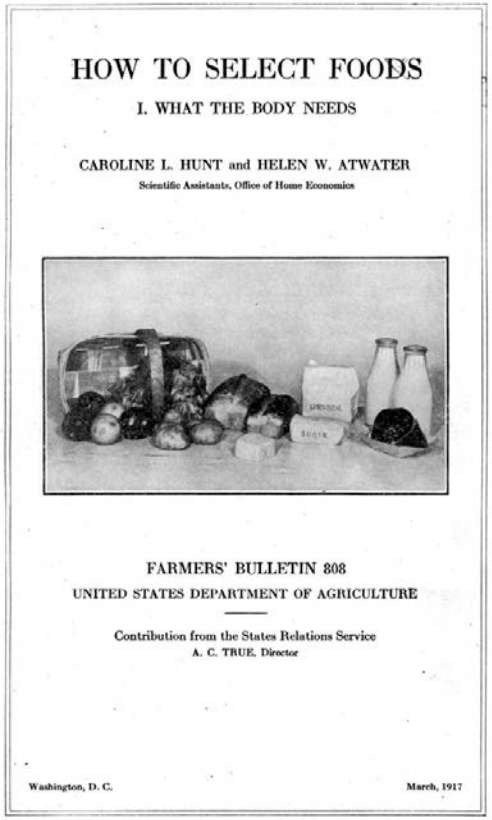
Nutrition: developing vitamin supplements and fortified food
Ag: producing more food and greater income

50s-60s: Protein

60s-80s: Dieta energy (calorie

90s-00s: Micronutrients

2010- : Diverse diet



HOW TO SELECT FOODS

I. WHAT THE BODY NEEDS

CAROLINE L. HUNT and HELEN W. ATWATER

Scientific Assistants, Office of Home Economics

FARMERS' BULLETIN 808

UNITED STATES DEPARTMENT OF AGRICULTURE

Contribution from the States Relations Service
A. C. TRUE, Director

Washington, D. C. March, 1917

Jan Veth, 1923 [Public domain], via Wikimedia Commons

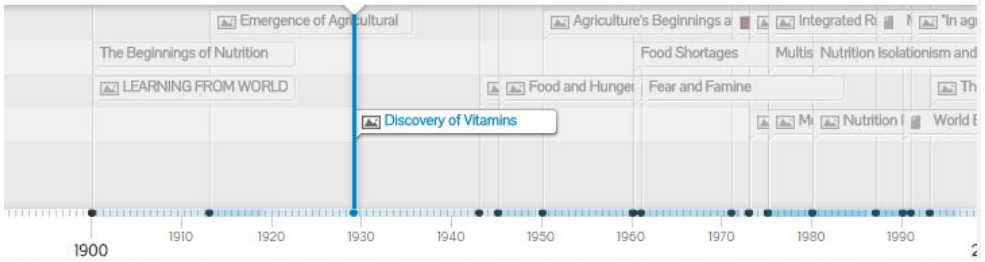
nn is credited with fundamental research linking vitamin deficiency with lisease 'beriberi'.

1929 Nutrition

Discovery of Vitamins

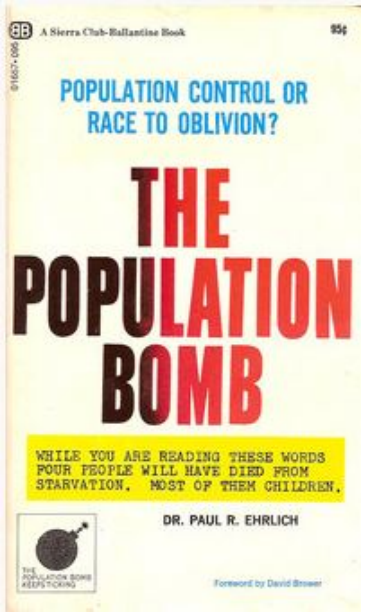
The field of nutrition science can be said to have arisen around the beginning of the 20th century, with the identification of vitamins as the cause of certain diseases. Christiaan Eijkman and Frederick Hopkins were awarded the Nobel Prize in Medicine in 1929 for identifying vitamin deficiency as the cause of a disease (beriberi). All the essential vitamins were isolated by the 1940s, and providing supplements and fortified foods became an expedient, life-saving treatment of deficiency. Watch the 1929 Nobel Award Ceremony.

1943
The Hot Springs Food Conference: A Seed of International Collaboration



Priorities for nutrition have shifted over time

Priorities	Example of responses
40s-60s: Vitamins	**Nutrition:** developing vitamin supplements and fortified food **Ag:** producing more food and greater income
50s-60s: Protein	**Nutrition:** skim milk for kwashiorkor, protein supplements, Applied Nutrition Programs, medical wards **Ag:** producing more food, Quality Protein Maize
60s-80s: Dietary energy (calories)	
90s-00s: Micronutrients	
2010- : Diverse diet	



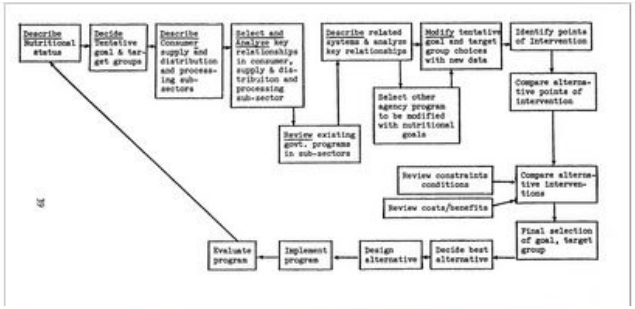
60s-70s: Aligned focus on dietary energy during the food shortage era

- Green Revolution; formation of CGIAR
- Concept of food security first defined in 1974 World Food Summit
  - *"availability at all times of adequate world food supplies"*
- Prevalence of malnutrition was estimated from food supply data

- *"Although deficiency of vitamins and minerals may cause serious health problems, especially among children, the therapy is now well known and relatively easy to apply so that the magnitude of this problem is almost negligible in relation to the one created by lack of calories and proteins."*

Chafkin et al., 1972 *Possible World Bank Actions on Malnutrition Problems*

Multisectoral in vogue



1975 — 1980 Nutrition

Multisectoral Nutrition Planning

In the 1970s, the emphasis of the nutrition community shifted to multisectoral nutrition planning, in part because the world food crisis

Ray Witlin / World Bank

A rural development project in Burkina Faso, 1974.

1975 — 1986 Agriculture

Integrated Rural Development Projects

For this time period, integrated rural development projects comprised 40 percent of all rural development projects, and 55 percent of them were in Africa. These projects tended to have an ambitiously broad set of activities rolled into a single project in a rural area, and

1975
Multisectoral Nutrition Planning

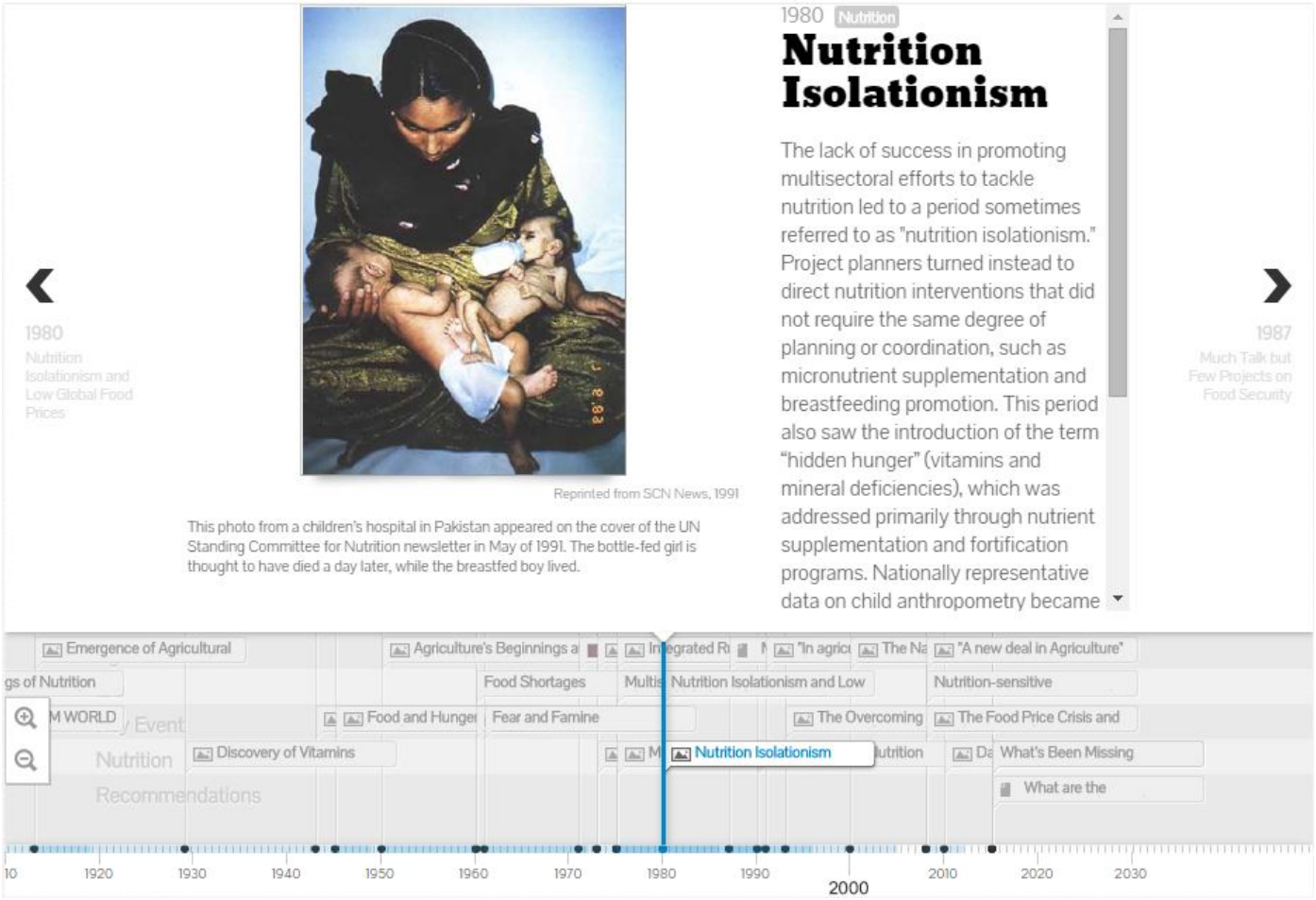
1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020 2030

SecureNutrition
Linking agriculture, food security, and nutrition

Mid 80s: Paths diverge

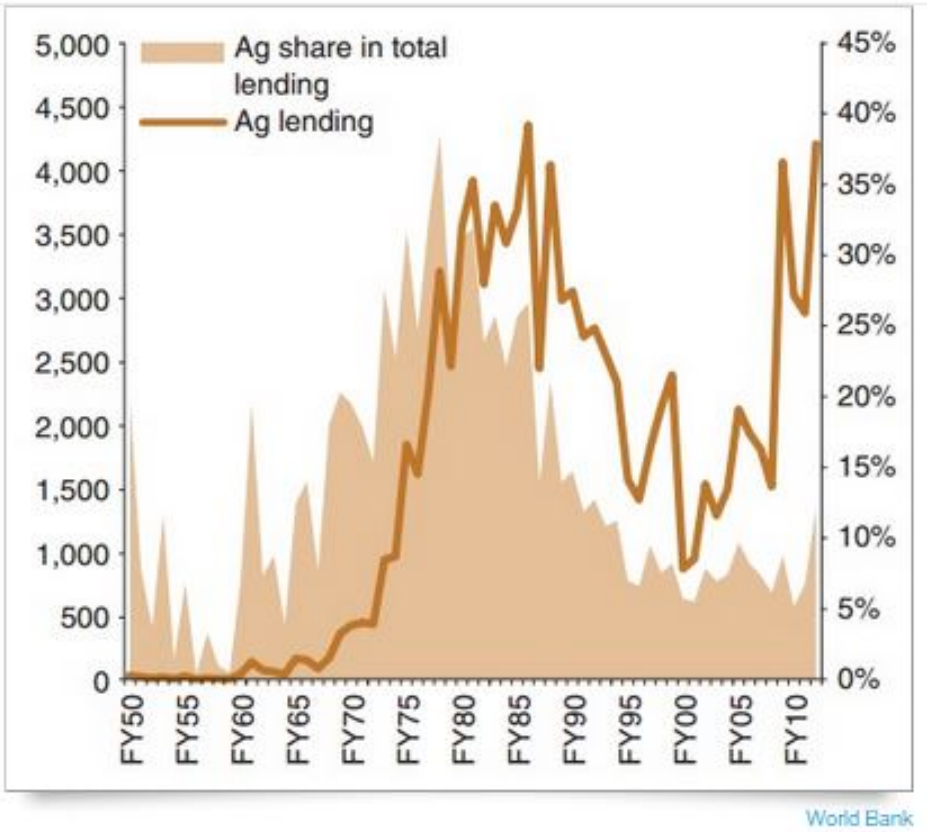
- Agriculture:
  - Failed integrated rural development operations (half of all indicate failure, 2/3 failure in Africa)
  - Declining interest in ag. investment due to unconducive policy environment, poor portfolio performance, low global food prices, new emerging topics (environment, girls education etc)
- Nutrition:
  - Multisectoral planning units dissolved an average of 6 years after they had started
  - New data on child anthropometry
  - Evidence on breastfeeding, deworming, community-based nutrition, growth monitoring
  - “Hidden hunger” & focus on supplementation, fortification

“If they don’t want to cooperate with us, we’ll do it ourselves”



SecureNutrition
Linking agriculture, food security, and nutrition

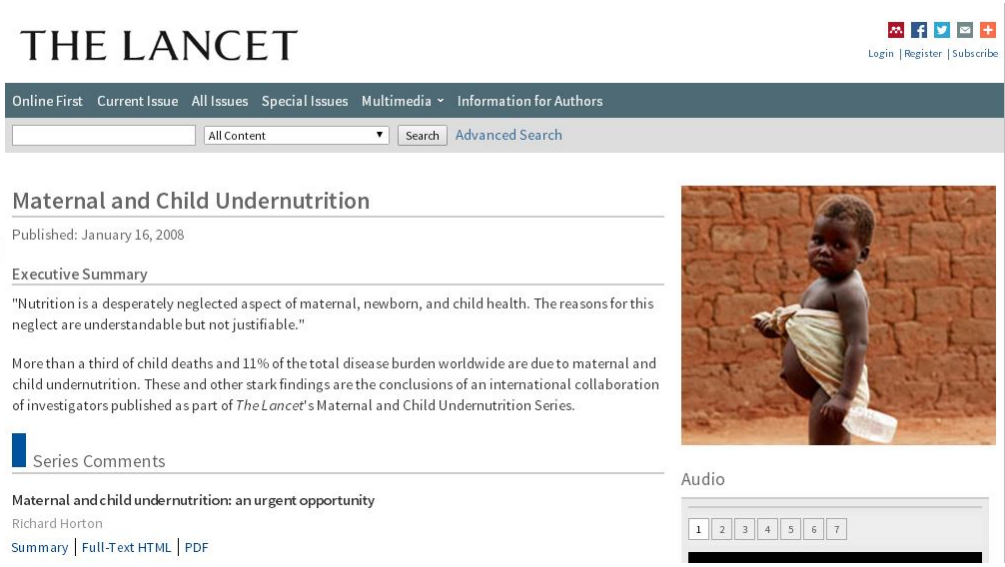
2000: The nadir of investment



World Bank Agriculture Lending Volume (in Nominal Million US$) and Share of Agriculture in Total World Bank Lending (IDA and IBRD).

SecureNutrition
Linking agriculture, food security, and nutrition

2008: Food price crisis



SecureNutrition
Linking agriculture, food security, and nutrition

2010 SUN: Twin track approach

Nutrition-sensitive strategies increase the impact of specific actions for nutrition

Scaling Up NUTRITION

Specific Actions for Nutrition

Feeding Practices & Behaviors: Encouraging exclusive breastfeeding up to 6 months of age and continued breastfeeding together with appropriate and nutritious food up to 2 years of age and beyond

Fortification of foods: Enabling access to nutrients through incorporating them into foods

Micronutrient supplementation: Direct provision of extra nutrients

Treatment of acute malnutrition: Enabling persons with moderate and severe malnutrition to access effective treatment

Nutrition-Sensitive Strategies

Agriculture: Making nutritious food more accessible to everyone, and supporting small farms as a source of income for women and families

Clean Water & Sanitation: Improving access to reduce infection and disease

Education & Employment: Making sure children have the nutrition needed to learn and earn a decent income as adults

Health Care: Access to services that enable women & children to be healthy

Support for Resilience: Establishing a stronger, healthier population and sustained prosperity to better endure emergencies and conflicts

Summary

Priorities	Example of responses
40s-60s: Vitamins	**Nutrition:** developing vitamin supplements and fortified food **Ag:** producing more food and greater income
50s-60s: Protein	**Nutrition:** skim milk for kwashiorkor, protein supplements, Applied Nutrition Programs, medical wards **Ag:** producing more food, Quality Protein Maize
60s-80s: Dietary energy (calories)	**Nutrition:** multi-sectoral nutrition planning **Ag:** Green Revolution, integrated rural development
90s-00s: Micronutrients	**Nutrition:** direct nutrition interventions, evidence building through RCTs **Ag:** Low food prices, distortionary policy environment
2010- : Diverse diet	**Nutrition:** SUN twin-track approach **Ag:** Expansion of ag. investment after food price crisis, CGIAR A4NH, biofortification…and [?]

Addressing nutrition through agriculture: What has been tried

At the World Bank:

- Many **analytical pieces and guidelines**
- **High-level support** from Bank management
  - '93 Overcoming Global Hunger Conference – *"food security is about access and nutrition as much as about production"* (WB VP Serageldin)
- Including nutrition in **agriculture strategies and 40+ rural development projects** (without proper M&E)
- Provision of **nutrition technical assistance** to Bank project teams (Nutrition Advisory Service in the 90s)

SecureNutrition
Linking agriculture, food security, and nutrition

Why didn't nutrition get taken up by agriculture?

- Persistent storyline in ag. has been that **aggregate increase in food supply and improved income** are the ways in which it can/should contribute to nutrition

- Nutrition (and ag) community has not effectively changed this storyline with a clear vision & targets for success and accountability.
  - "The Bank pulled away from food security in the '90s because there were so few answers about what should be done."
  - *Compared to global & institutional targets*: "We [nutritionists] are selling a product agriculture doesn't need."

SecureNutrition
Linking agriculture, food security, and nutrition

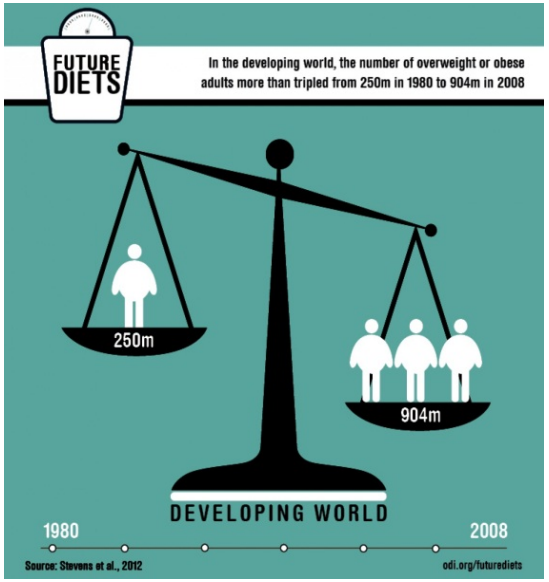
Today: Renewed interest for nutrition through agriculture

1970s: Food shortage paradigm

- Lack of calories *was* the major problem

Now: **Nutritious** food shortage paradigm

- Triple burden of malnutrition in all regions
- Diabetes and child overweight rising fastest in Africa
- Theoretically possible for everyone to eat *enough*, but impossible for everyone to eat *nutritious diets*



Recommendations with key actions

1) Establish a **common vision** globally for agriculture's role in improving nutrition, with measurable outcomes and targets

- Ensure post-2015 framework moves beyond hunger
- Further develop metrics of access to and consumption of adequate nutritious food
- Evidence base: Similar to where we were in 80s with basic nutrition, need new "nutrition-sensitive" data and indicators now
  - Where (and for whom) are food access and diets inadequate?
  - What are the consequences of poor diets on health, productivity, and environment?
  - What policies underpin access to nutritious food and dietary quality of populations?

SecureNutrition
Linking agriculture, food security, and nutrition

Recommendations with key actions

2) Align agriculture investments to **level the playing field** for nutritious food

- Increase R&D on fruits, vegetables, legumes, sustainable animal-source foods, including through public investment and PPPs
- Invest in within-country capacity for R&D and seed systems for nutritious crops and livestock of local importance
- Reduce risks associated with horticulture and small-scale livestock production

Recommendations with key actions

3) **Create demand** for nutritious and sustainable food

- Social marketing strategies based on nutrient/health attributes of foods
- Increase consumers' nutrition knowledge, esp. where it is a limiting factor
- Support other actions outside the agriculture sector that affect food consumption

Source: Reprinted from FAO *The State of Food and Agriculture* 2013 (FAO 2013a).

SecureNutrition

Recommendations with key actions

4) Build and sustain **capacity** for addressing nutrition through agriculture and to monitor its progress

- Develop basic agriculture-nutrition training for staff, consultants, students
  - *Led by* agricultural technical agencies
- Fund university research and training on food systems
- Provide ongoing support to governments for capacity in monitoring systems

SecureNutrition
Linking agriculture, food security, and nutrition