Can Food and Agricultural Policies be Effective Tools to Improve Health and Nutrition?

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Shortage of Pork Predicted


Mmmm, tastes delicious!
Politician Eats Horse Lasagna

Source: Andreas Thelen, Photo, www.bild.de
The Food Crisis Arrived!

Last Resort: Haiti, January 2008

Thai Rice Mountains

Source: AFP Photo/Pornchai Kittiwongskul

India – Grain Stock 2005/06 – 2012

Surplus Grain in India 2012

Maize Stocks in Zambia 2012
Rotting Maize in Zambia 2012

Up Close: Maize in Zambia 2012

2,900,000,000,000
Pounds of Food Lost

2-3 Billion More People Could be Fed

From Agriculture to Nutrition: A Simplified Version

Key Health and Nutrition-Related Drivers of Contemporary Food Systems

- Food Price Changes

Real Food Prices 1950-2030

Index: 1924 = 100
Wheat Weekly Price Minus 12-Month Moving Average

The Primary Reasons for Food Price Fluctuations Since 2007
- Climate change
- Policy interventions
- Speculation
- Reduced grain stock

Key Health and Nutrition-Related Drivers of Contemporary Food Systems
- Food Price Changes
- Economic Growth, Urbanization and Globalization

Per Capita Annual Consumption of Selected Food Groups by Chinese Rural Households (Index, 2009=100)

Per Capita Annual Consumption of Selected Food Groups by Chinese Urban Households (Index, 2009=100)

Key Health and Nutrition-Related Drivers of Contemporary Food Systems
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- Economic Growth, Urbanization and Globalization
- Research and Technological Change
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- Demographic Change

Interactions Between Food Systems and Human Health and Nutrition

The Generic Pathway

Available food, clean water, good sanitation, health care

↓ Prices

Money and time constraints

Access to food, clean water, good sanitation, health care

↓ Behavior and preferences

Intra-household allocation

↓ Health and nutrition
**A Generic Food Supply Chain**

- Natural resources and input
- Primary production
- Transport, storage, and exchange
- Secondary production
- Transport, storage, and exchange
- Consumption
- Health and nutrition

**Illustrations of Areas for Health-Sensitive Policy Interventions Along The Food Value Chain**

**Natural resources and input**
- Improve water management systems to avoid water borne diseases
- Improve quality of drinking water to reduce risk of infectious diseases
- Add micronutrients to soil to reduce micronutrient deficiencies in humans
- Control interaction with wildlife to reduce risk of zoonotic diseases

**Primary production**
- Promote increased productivity and production diversity through research and policies
- Research and incentives to develop and facilitate adoption of biofortified crops
- Enhance gender-specific productivity in activities traditionally undertaken by women
- Strengthen gender equality in production decisions
- Improve interaction between humans and animals to reduce the risk of zoonotic diseases
- Introduce labor-saving technology and production practices in households with HIV/AIDS affected members
- Improve sanitary conditions in the production process

**Secondary production**
- Fortification
- Labeling and regulation of food processing with respect to content and processes
- Improve sanitary conditions in food processing
- Maintain food safety standards suitable for the intended consumers

**Transport, storage, and exchange**
- Improve storage and transportation facilities to reduce the risk of micotoxins and quality deterioration
- Infrastructure investments

**Regulation of food advertising**
- Health-focused social marketing campaigns
- Improve cold chain for perishable foods
Illustrations of Areas for Health-Sensitive Policy Interventions Along The Food Value Chain

- Health and nutrition education
- Strengthen gender equality in consumption and allocation decisions
- Reduce burden on women’s time
- Create and implement food and health safety nets

Health and nutrition

- Empower women in household and community decision-making
- Improve sanitation and drinking water
- Enhance access to primary health care