

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

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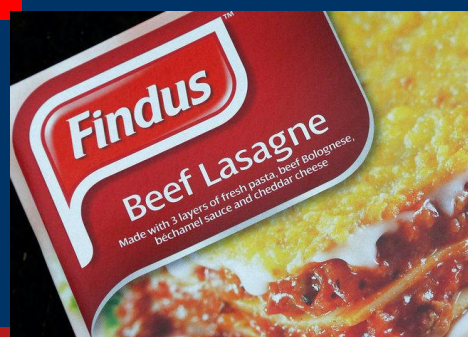
March 7, 2013

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Shortage of Pork Predicted



Source: *How Nutritious is Horse? The Other Red Meat* by Darya Pino,
<http://science.kqed.org/quest/2011/01/07/how-nutritious-is-horse-the-other-red-meat/>
Image by [Tambako the lasagne](#)



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*Mmmm, tastes delicious!
Politician Eats Horse Lasagna*



Source:
Andreas Thelen,
Photo,
www.bild.de

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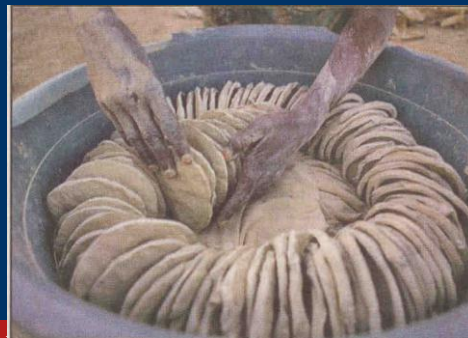


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The Food Crisis Arrived!



Last Resort: Haiti, January 2008

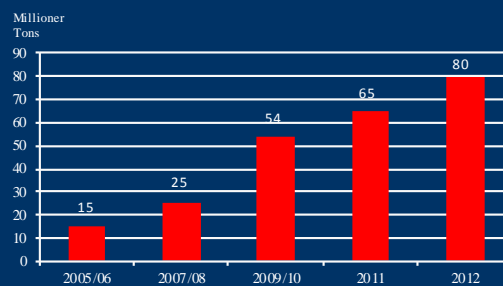


Thai Rice Mountains



Source: AFP Photo/Pomchai Kittiwongsakul

India – Grain Stock 2005/06 – 2012



Surplus Grain in India 2012



Maize Stocks in Zambia 2012

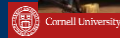
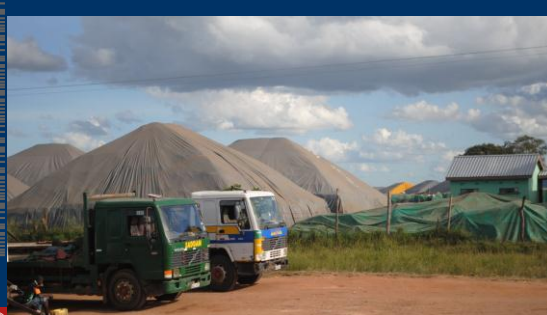


Photo courtesy William J. Burke

Rotting Maize in Zambia 2012



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Photo courtesy William J. Burke

Up Close: Maize in Zambia 2012



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Photo courtesy William J. Burke

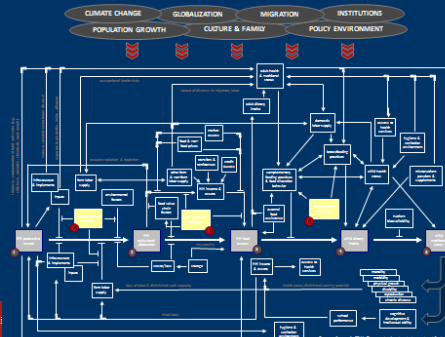
2,900,000,000,000
Pounds of Food Lost

2-3 Billion More People
Could be Fed



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From Agriculture to Nutrition: A Simplified Version



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Key Health and Nutrition-Related Drivers of Contemporary Food Systems

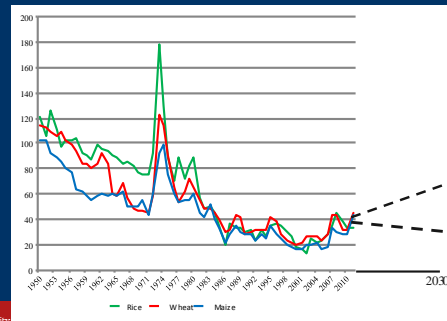
Food Price Changes



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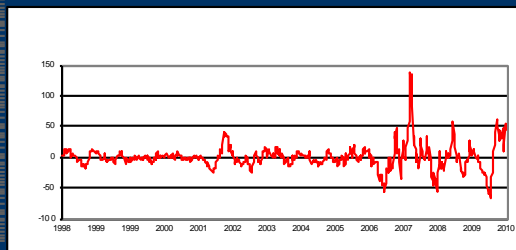
Real Food Prices 1950-2030

Index: 1924 = 100



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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

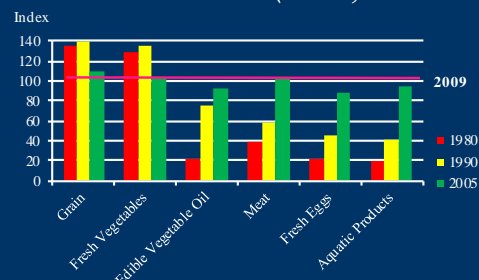


Key Health and Nutrition-Related Drivers of Contemporary Food Systems

- Food Price Changes
- Economic Growth, Urbanization and Globalization

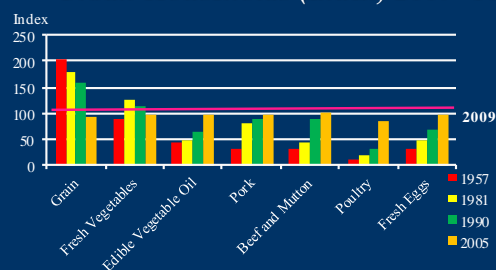


Per Capita Annual Consumption of Selected Food Groups by Chinese Rural Households (Index, 2009=100)



Source: NBS: China Statistical Year Book, 1987 and 2010.

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



Source: NBS: China Statistical Year Book, 1987 and 2010.

Key Health and Nutrition-Related Drivers of Contemporary Food Systems

- Food Price Changes
- Economic Growth, Urbanization and Globalization
- Research and Technological Change



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- **Biofuel and Competition for Resources**



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- Food Price Changes
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- **Land Grabbing**



Key Health and Nutrition-Related Drivers of Contemporary Food Systems

- Food Price Changes
- Economic Growth, Urbanization and Globalization
- Research and Technological Change
- Biofuel and Competition for Resources
- Land Grabbing
- **Climate Change**

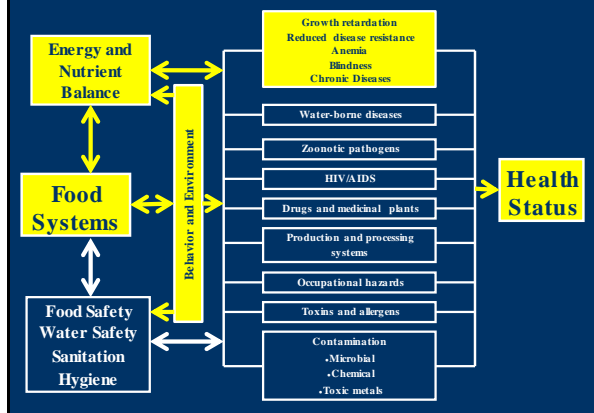


Key Health and Nutrition-Related Drivers of Contemporary Food Systems

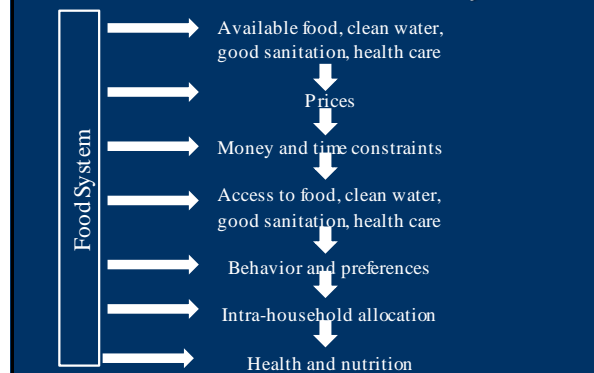
- Food Price Changes
- Economic Growth, Urbanization and Globalization
- Research and Technological Change
- Biofuel and Competition for Resources
- Land Grabbing
- Climate Change
- **Demographic Change**



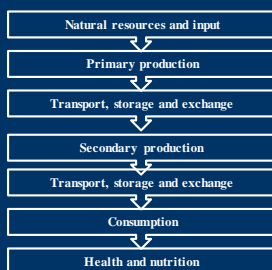
Interactions Between Food Systems and Human Health and Nutrition



The Generic Pathway



A Generic Food Supply Chain



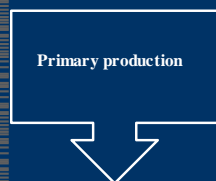
Illustrations of Areas for Health-Sensitive Policy Interventions Along The Food Value Chain



- 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



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



- 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



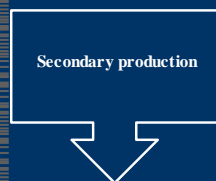
Illustrations of Areas for Health-Sensitive Policy Interventions Along The Food Value Chain



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



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



- 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



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



- 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

Consumption

- 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



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

Health and nutrition

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

