
Food Security in a Globalised World: A Critical Assessment

Geoffrey Lawrence

David Burch

Reidar Almas

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Food Security in a Globalised World: A Critical Assessment

Introduction: the global food crisis

Factors contributing to global food insecurity

Food security challenges for the 21st Century

Discussion: The political economy of global food insecurity

Conclusions

Introduction: The Global Food Crisis

Between 2006 and 2008 global food prices had increased by 83 percent

In 2007, an additional 75 million people were pushed into chronic hunger

By 2009, 1.02 billion of the world's six billion people were chronically hungry

Various governments have altered policies to deal with the food crisis

This has not stopped violent protest around the world over mounting food costs

Global farm output needs to double between now and 2050 if it is to match demand, without increasing food costs

Factors Contributing to Global Food Insecurity

1. The precarious position of agricultural small-holders
2. Demand from emerging economies
3. The neoliberal marketplace
4. Peak oil and bio-fuels
5. Climate change and altered weather patterns

Factors Contributing to Global Food Insecurity

The precarious position of agricultural small-holders

De-peasantisation

The removal of peasants from the land, accompanied by rural outmigration, as more 'advanced' forms of agriculture replace subsistence farming

Factors Contributing to Global Food Insecurity

Demand from emerging economies

The 'nutrition transition': traditional staples → meat/dairy/processed

Demand for meat in developing countries doubled 1986-2007

China, India, Thailand, Egypt → land/water/crops for animals

Factors Contributing to Global Food Insecurity

The neoliberal marketplace

Deregulation and disinvestment

- Privatisation of services once provided by the state
- Extension, through legal changes, of private property rights
- Support of free trade by liberalising state and global regulations
- Deregulation of labour markets to enhance productivity (+ disciplining public servants)
- Alteration of regulatory mechanisms to enhance control by private capital

= Less protection for farmers: face the 'free' market

Factors Contributing to Global Food Insecurity

The neoliberal marketplace

Speculation in foods

For 75 years to the 1990s limits to trading in corn/cotton/soybean/wheat

1990s exemptions from speculative trading.....2000 removal of limits to ag. futures

Turmoil in global finance/mortgage/housing → ag. commodities

Speculation in foods: investment in ag. futures \$13 bln 2003, \$260 bln 2008

Between 2000-2007 wheat ↑ 147%, corn ↑ 79%, ↑ soybeans 72%

Every 1% increase in food prices = an additional 16 million people facing hunger

Factors Contributing to Global Food Insecurity

The neoliberal marketplace

'Financialisation'

the increasing importance of financial markets, financial motives, financial institutions, and financial elites in the operation of the economy and its governing institutions, both at the national and international levels

Factors Contributing to Global Food Insecurity

The neoliberal marketplace: 'Financialisation'

- Financial institutions have become increasingly involved in agri-food industries: farmland purchase; input supplies; storage and logistics; food processing; commodity trading; food services.....
- 2007 private equity group 3i purchased Inspicio PLC (largest food testing/certificn in UK)
- 2008 UK-based Emergent Asset Management – African Ag. Land Fund, \$500 mll
- 2008 Hedge fund manager Ospraie – 66 grain elevators from ConAgra for \$21 bll
- 2006 merchant bank Goldman Sachs – 13% holding of China's Yurun Foods (meat/poultry processing); 2008 \$300mll for poultry farms
- Sovereign wealth funds (Abu Dhabi, Libya, Saudi Arabia) – agri-food investments
- Daewoo logistics – sought 99 year lease of 1.3m ha of Madagascar for corn/oil bio-fuel

Factors Contributing to Global Food Insecurity

Peak oil and bio-fuels

Peak Oil: Increasing costs for fuels/pesticides

Peak Phosphorus: increasing costs of phosphatic fertilizers

Increased cost/price pressures

But: Bio-fuels.....food-into-gas-tanks

Scarce foodstuffs.....commodity price increases

Factors Contributing to Global Food Insecurity

Climate change and altered weather patterns

Over last 50 years world has undergone 'warming': human activity

Greenhouse gases/aerosols have been implicated

Global temperatures will ↑ between 1.4 and 5.8 degrees by 2100

More severe weather events + rising sea levels

'Climate change refugees' → 150 million by 2050

Food Security Challenges for the 21st Century

- 1. Achieving global food security in the face of climate change and world population growth**
- 2. Increasing food production without compromising the environment**
- 3. Reducing waste in, and energy requirements of, agri-food systems in the context of global supermarket expansion**
- 4. Ensuring food sovereignty in an era of 'financialisation'**
- 5. Introducing 'sustainable diets' into a world of growing consumerism**

Food Security Challenges for the 21st Century

1. Achieving global food security in the face of climate change and world population growth

Climate change

Warming of the climate is now unequivocal (IPCC 2007) – negative affects on world food production

Trend in greenhouse gas emissions is significantly above the worst case scenarios in earlier reports: worst-case climatic outcomes should be viewed as likely (US Nat. Ocean. & Atmos. Admin 2009)

World population growth

Expected to increase from 6.7 billion today to 9 billion in 2050

As stated earlier.....

Global farm output needs to double between now and 2050 if it is to match demand, without increasing food costs

Food Security Challenges for the 21st Century

2. Increasing food production without compromising the environment

Productivity gains will be 'forced' on farmers via cost-price pressures

New technologies/management regimes will be adopted to increase productivity

It is unlikely that gains will match those achieved in earlier decades

Agricultural intensification will place extra burdens on the environment

Yet, there will be pressures to produce in more sustainable ways

Climate change will provide opportunities and threats – with some regions/nations increasing outputs, and others contracting

Food Security Challenges for the 21st Century

Increasing food production without compromising the environment

Productivism

increasing the efficiency of resource use, and volume of production, per hectare farmed, largely via high-tech inputs and intensification

Features

- undifferentiated products for mass markets
- cheap food 'food from nowhere'
- applications of synthetic chemicals
(herbicides, insecticides, fungicides)
- use of larger, more advanced, machinery
- monocultures
- externalisation of wastes
- strong support by the state (early years) market (recently)
- the 'technological treadmill'
- output over sustainability

Food Security Challenges for the 21st Century

Increasing food production without compromising the environment

Report by International Assessment of Agricultural Science and Technology Development (IAASTD – scientists and UN agencies) 2008 has linked high-tech farming with:

- environmental and natural resource degradation
- deforestation
- introduction of invasive species
- increased pollution
- increased greenhouse gas emissions

A condemnation of productivism? What are the options (neo-productivism?)

Food Security Challenges for the 21st Century

3. Reducing waste in, and energy requirements of, agri-food systems in the face of global supermarket expansion

Upstream: on-farm spoilage, packaging + transportation (food miles), in-store wastage

Downstream: consumers

UK, US → approx. 1/3rd of all food purchased is thrown away

Supermarkets to the rescue?

Food Security Challenges for the 21st Century

4. Ensuring food sovereignty in an era of 'financialisation'

Concerns over:

The increasing power of finance capital in determining allocation of agri-food resources

Food for profit not for the hungry

Speculative practices raising food prices

'Deterritorialisation' creating resentment, social dislocation, protest

For First World producers/consumers?

- **increased prices on world markets can ease cost-price pressures and stimulate production**
- **moral issue of diverting foods into bio-fuels**

Food Security Challenges for the 21st Century

Ensuring food sovereignty in an era of 'financialisation'

IMF and World Bank 'forcing' the South to shift agriculture from local production to export crops – comparative advantage over 'self sufficiency'

Food imports by countries in the South grew by 115% between 1970 and 2001

During this time trade surplus in the South of US\$1 bln became deficit of US\$11 bln

People in the South are vulnerable when imported food prices increase

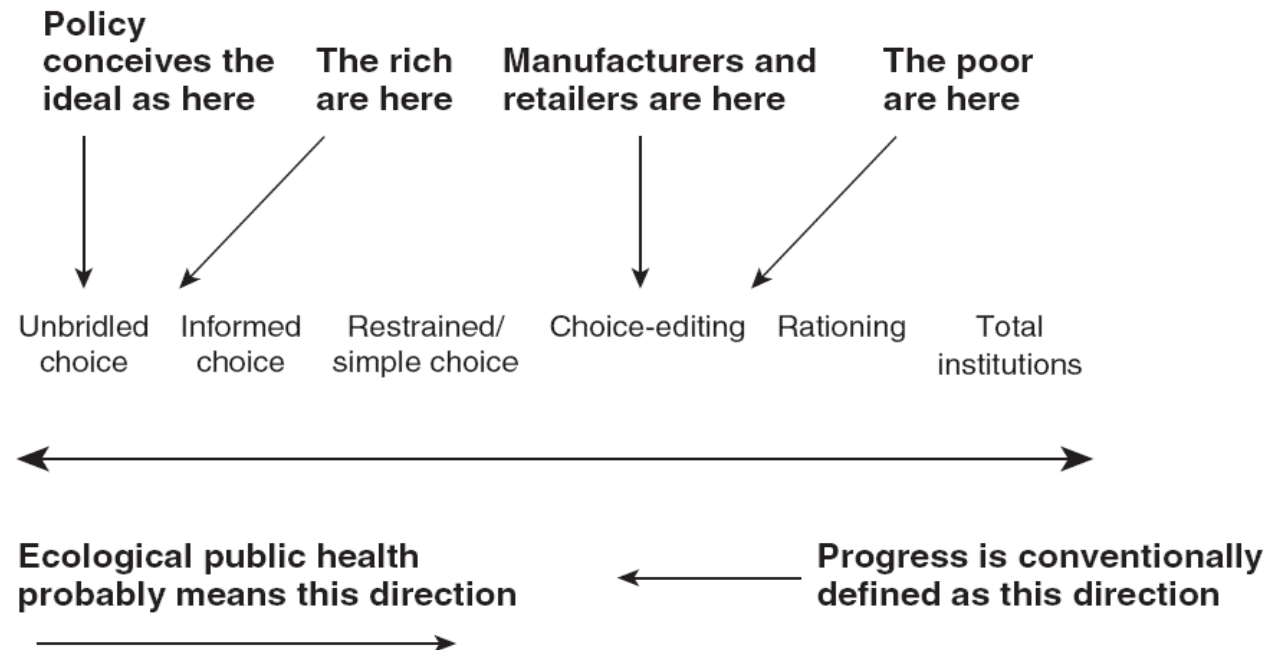
Predictions: global warming will ↑ cereal production by 3-9% in the North but ↓ it by 3-7% in the South (more dependence on the South for food supplies from the North)

- : more land in developing nations will be used to provide food for export
- : more land in developing nations will be used to produce biofuels
- : more people in developing nations are likely to go hungry

More protests re: food insecurity... 'food sovereignty' a major movement?

Food Security Challenges for the 21st Century

5. Introducing 'sustainable diets' into a world of growing consumerism



Source: Lang, Barling, Caraher, 2009 *Food Policy*, OUP

Food Security Challenges for the 21st Century

Tim Lang (forthcoming 2009)

We all have a real vested interest to see diet as part of the move to sustainable societies. At the same time, we are all locked into a partial notion of progress. Barriers to change are systemic, so change must be systemic, too. The discourse about food security symbolises the need to integrate nutrition, environmental sustainability and social justice. No other food-policy thinking passes the laugh test.

Discussion: The Political Economy of Global Food Insecurity

Structure

Agency

Contradiction

Conclusions

Climate change/pop growth: more food will be needed

There will be pressures on the South to grow more for export to the North

There will be pressures on the North to provide 'basics' to the South: productivism

Agricultural intensification (productivism) will:

- be seen as the key to future food security
- lead to adoption of new technologies (nano/bio-tech)
- result in greater environmental destruction
- displace more people from farming in the South

Neoliberalism will:

- encourage 'financialisation', creating further instability in global markets
- place more responsibility on private actors to deliver 'sustainability'

Climate change will affect developing nations' ability to meet food needs:
reinforcing the demand for 'food sovereignty'

Social protest in the South over food availability is likely to intensify

Food security will remain one of *the* concerns of the 21st Century

Conclusion

