

U.N. Conference on Trade & Development

Enhancing Food Security through Agricultural Development

Thomas Lines
www.tomlines.org.uk

Special Event on Impact of Economic and Financial Crises on Commodity Dependent LDCs
Fourth U.N. Conference on Least Developed Countries
Hamidiye Hall, Istanbul Congress Centre

May 8th, 2011

**What explains the food price crisis
of 2007-08 and 2010-11?**

Characteristics of the food price crisis

- ✧ It appears from *global* markets
 - ✧ Lesser impact in Laos in 2008 because more isolated from world food markets
- ✧ It affects wheat, rice and maize prices in particular
- ✧ It can affect countries even where the market appears to be in balance
 - ✧ Maize in Zambia

The 'hunger gap'

The hunger gap between the case study countries has widened:

Global Hunger Index, 1990:

Best: Tanzania 22.9 Worst: Burundi 31.8

Global Hunger Index, 2010:

Best: Benin 17.1 Worst: Burundi 38.3

- ✧ Benin, Cambodia, Laos improved greatly.
- ✧ Tanzania and Zambia improved slightly.
- ✧ Burundi deteriorated.

It's a crisis of *industrial* agriculture

- ✧ Oil & fertiliser prices increased by *more* than cereal prices
- ✧ Prices of main export crops (coffee, cotton) increased by *less*

Real price rises since late 1970s:

- ✧ Crude oil +59%, phosphate rock +46%
- ✧ Wheat -19%, maize -25%, rice -45%
- ✧ Cotton -57%, coffee -63%

Earlier evidence from Zambia

Rural poverty *declined* at time of economic crisis and de-urbanisation, in 1990s

- ✧ Emphasis on main staple crop (maize) was dropped
- ✧ Fertiliser subsidies abandoned
- ✧ Prior research into other food crops
 - ✧ Cassava, groundnuts, sweet potatoes
- ✧ Decline in rural poverty from 92% in 1993 to 74% in 2003
 - ✧ Ascribed to growth of food crops (cassava, sweet potatoes, groundnuts) and cash crops (cotton, tobacco)
 - ✧ Described as ‘a remarkable achievement’

Evidence from Asia

Indian cereal production since late 1960s:

Rice up 125%

Wheat up 285%

Millet barely changed

- ✧ But millets contain more proteins, minerals and vitamins and are more resilient

In Laos:

dia

- ✧ Consumption of roots and tubers has reduced, partly because of rice strategy
- ✧ But they could improve food security, acc. to HLTF
- ✧ Coping strategy of collecting forest foods in 2008

Higher rural incomes are needed

What prevents them? What impact will they have on food security?

- ✧ Greatest poverty and hunger is in rural areas
- ✧ Major inputs are *imported*
 - ✧ Fuel, agrochemicals, fertilisers
 - ✧ This is expensive for farms, expensive for the country
 - ✧ It's good for the foreign firms which produce them
 - ✧ Part of a dependent, industrial system of agriculture
 - ✧ Can harm the soil, water and air
 - ✧ Especially under monocropping

Policy conclusions

1. Restrict influence of global markets on basic food supplies
 - ✧ Post-WW2 experience of W. Europe
2. Do not concentrate on just one staple crop
 - ✧ E.g. maize in Zambia, rice in India and Laos
3. Encourage traditional, 'non-traded' crops
 - ✧ Prices are less influenced from abroad
 - ✧ Evolved to suit *local* circumstances
 - ✧ Can be more nutritious
 - ✧ Use local agrarian knowledge
 - ✧ Benefits of nutritional diversity
 - ✧ 'Enormous' number of species presented at Arusha conference on underutilised plant species, 2008

Policy conclusions

Return to soil science, mixed cropping, natural fertilisers and pest controls

- ✧ ‘functional use of biodiversity’
- M. Pimbert (IIED)

- ✧ Agroforestry - use of tree cover

 - ✧ e.g. Faidherbia acacia provides shade for crops and nitrogen for soil

- Tropical agriculture for tropical conditions

The knowledge base required

Use existing knowledge

- ✧ e.g. Zambian and Malawian reported to be 'very knowledgeable' on wild plants to control insects and pests

Relevant research institutions exist

- ✧ e.g. World Agroforestry Centre (Nairobi), World Vegetable Center (Thailand; Arusha, Tanzania), International Institute for Tropical Agriculture (Ibadan, Nigeria)
- ✧ Use them and develop them

Revive and expand government extension services

- ✧ As a discussion, not a lecture
- ✧ Farmer field schools
 - ✧ Advisors and farmers learn from each other, or farmers teach each other
 - ✧ Help women, less literate farmers, those with medium land size
 - ✧ ‘remarkable signs of empowerment’ - IAASTD

Evidence of effectiveness

From agroecology:

- ✧ Malawian maize yields 2-3 times higher under Faidherbia canopy

From natural pest controls:

- ✧ Mixed-variety rice cropping in China improved yields by 89%, reduced rice blast disease by 94%

From farmer field schools:

- ✧ Participants' incomes increased by 61% on average in Kenya, Tanzania and Uganda