

# **Food reserves in developing countries: options for improved food security**

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# Structure of this talk

1. International policies and the G20 agenda
  - Limitation of biofuels mandates?
  - A multilateral grains agreement?
  - International stockpiling?
  - Enhanced futures markets regulation?
2. National policies for small LICs
  - The food balance
  - Commercial policy
  - National food stockpiles
  - The balance between trade and stocks
3. Humanitarian and emergency stocks
  - PREPARE
  - The role of markets
  - What should the G20 agree?

# International policies: biofuels and multilateral contracting

## Reduce biofuels mandates and subsidies:

I have not been persuaded that biofuels demand was more than one of a number of contributory factors to grains price movements over 2007-11. Elimination of subsidies would be helpful, as would mandate flexibility.

## An International Wheat Agreement (IWA) style arrangement:

The four active IWAs, starting with that of 1949, were based on multilateral contracting. IWA exporting members guaranteed assured supplies of wheat subject to a maximum price while importing countries guaranteed purchases subject to a minimum price. These depended on wheat trade being largely inter-governmental and worked well so long as prices were not very volatile. They would not function in current market conditions.

# International policies: stockpiling

- a) It is difficult to make the argument that private sector stockholding is suboptimal at the world level, at least in maize and wheat where risk can be offset on futures markets.
- b) The major falls in grains stocks up to 2005 were in China. Outside China, stock-consumption levels were fairly stable at least to 2010. Would Chinese stocks have been available to the rest of the world? Are we sure that the reported Chinese stock changes reflect movements and not changes in counting conventions?
- c) Public storage crowds out private storage – if stocks are seen as inadequate, it would be better to provide enhanced private incentives.
  - My view is that Chinese stocks were important in shielding world markets from the growth in Chinese demand over 2000-06. Higher world stocks in 2007 would have reduced the 2008 spike and perhaps also have reduced volatility.
  - Even if there is an argument for an international grains stockpile, which I doubt, now is not the right time to consider a stock rebuilding.

# International policies: futures market regulation

- a) One concern is that trend-following speculators (non-commercial traders) can generate bubbles.
  - b) There is mixed evidence on whether the 2007-08 price spike was a bubble phenomenon. In work for UNCTAD, I found little evidence of bubbles in grains although I found a small bubble for soybeans and soybean oil in 2007. Others have found stronger and more widespread evidence of bubble.
  - c) Index investors state that they invest in the range of commodities for portfolio diversification. There is stronger evidence that this group was an important driver of all commodity futures prices in 2007-08. There is much weaker evidence that they remained important in 2010-11.
  - d) Non-commercials (“speculators”) provide liquidity for hedgers. The econometric evidence supports the view that both index providers and money managers (hedge funds) are volatility-reducing. Commercials (“hedgers”) increase volatility as they seek to protect themselves.
- Prohibition of index trading and/or a transactions tax are both likely to increase, not reduce, volatility and to make hedging more costly.

# National policies: the food balance

We need to distinguish between

- a) net food exporters (e.g. Thailand)
- b) net food importers (e.g. Philippines) and
- c) countries which are generally self-sufficient but which need to import in the event of a bad harvest (e.g. Malawi).

The staple grain is also important

- the world maize (corn) and wheat markets work efficiently and price transmission is good, particularly in maize
- the world rice market is inefficient with low transmission; rice commerce remains dominated by intergovernmental transactions.

Market-based policies work best for those grains where markets function well.

# Commercial policy

- Asian rice producing countries have used commercial policy over many decades to stabilize prices to domestic consumers.
- Historically, the main instruments have been variable rate export taxes and procurement for national stockpiles.
- Export taxes and/or restrictions push the burden of adjustment onto importing countries, often poorer than the exporters (e.g. Haiti in rice). Volatility increases on world markets.
- These policies have also tended to raise prices in the exporting countries and hence to redistribute from producers to consumers and from the countryside to the cities. Price stability is costly even domestically.
- We cannot reasonably ask governments to abandon these policies. The better approach will be to subject their use to WTO disciplines. These should push for variable rate export taxes in place of quotas or export bans (i.e. tariffication) and should also aim to cap these tax rates.

## Export bans make everyone worse off

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*From Prof Christopher L. Gilbert.*

Sir, Professor Jack Winkler ([Letters, FT.com, May 16](#)) is correct that it may sometimes be rational for individual commodity exporters to introduce export controls in times of high world prices in order to insulate their domestic consumers from these prices. However, this is rational in the sense that the “confess” or “defect” strategy is also rational in the famous “prisoners’ dilemma” game. In following narrowly defined self-interest, both prisoners make themselves worse off.

Similarly, in world trade, the single-minded pursuit of self-interest is likely to make all countries worse off. In the case of export bans, this results from the increased volatility of what becomes a residual world market together with increased counter-party risk in international contracting.

The outcome will be a costly and unnecessary increase in self-reliance. The weakest suffer most – witness Haiti and the Philippines in the 2008 world rice market.

The role of global institutions, such as the WTO, is one of balancing legitimate self interest against the requirements of an efficiently functioning and just system for world commerce. I encourage the FT to stand firm in its commitment to these ideals.

**Christopher L. Gilbert,**



# National food security stocks

- Even if private sector storage is adequate at the global level, it is unlikely to be adequate in many developing countries, on account of limited futures market access plus policy risk (since governments cannot credibly commit not to intervene).
- This provides the motivation of national food security stocks. Two important points:
  - a) Stock management is technically difficult and best managed by the private sector, perhaps on behalf of government.
  - b) In Africa, public storage has almost completely crowded out private storage. In Asia, interventions have been “at the margins of the private marketing system” (Timmer, 2010).
- Christophe Gouel has looked at the optimal balance between trade and stockpiling for a small country. In general countries should both trade and operate a national stockpile.
- National food stockpiles should aim
  - to complement and not substitute the private sector; and
  - to complement and not substitute grain imports and exports.

# National policies: trade *versus* stocks or trade *and* stocks

- Starting from around 1985, the multilaterals pushed trade as a superior instrument for food security than national food security stocks.
- Stocks were seen as costly and often poorly managed.
- Gouel's work shows that trade and stocks should be seen as complementary, not alternatives. Destocking is valuable when the world price is high; storage is attractive when it is low. In the converse cases, importing/exporting are more attractive.
- Countries which are generally net importers should permit exports when they have a good harvest and the world price is high.
- Storage is more attractive for countries where transport costs impose a high wedge between import and export parity prices. Improved infrastructure can contribute to food security.

# Markets and food security

- Food markets do not always work efficiently and to the benefit of households which lack the requisite purchasing power.
- In Asia, food security has been ensured through marginal interventions. In parts of Africa, food aid has replaced the market as the major channel for food procurement and delivery. This is undesirable – it stifles development, adds to costs and creates dependency.
- There are two specific problems in LICs:
  - a) Lack of communication between government and the private sector results in divergent views on likely market developments, perhaps resulting in accusations that the private sector is “hoarding” grain. Lack of consultation can result in government regulations which undermine private sector actions. Improved communication channels could help.
  - b) Performance risk: when price rises sharply, suppliers may believe that the costs of default are small relative to those of contractual performance. WFP take on an intermediation role in the contracting process, allowing governments and the private sector to make viable plans in advance of any crisis.

# Humanitarian and emergency stocks

“Relatively smaller food security emergency reserves can be used effectively and at lower cost to assist the most vulnerable. Unlike buffer stocks that attempt to offset price movements and which act as universal subsidies benefiting both poor and non-poor consumers, emergency food reserves can make food available to vulnerable population groups in times of crisis. In addition, emergency reserves of relatively small quantities of staple foods will not disrupt normal private sector market development which is needed for long term food security”. *FAO et al. (2011)*

Two issues:

- 1) Which are the vulnerable households? *This group should be narrowly defined if disruption of private sector is to be avoided.*
  - 2) How can assistance be efficiently targeted at this group? *Leakage to the general population will also disrupt normal market activity.*
- Children and the sick are prominent among the vulnerable. They can be effectively targeted through school and hospital meals.

# The PREPARE proposal

Appendix E of FAO. *et al.* (2011) envisages a Pre-Positioning for Predictable Access and Resilience (PREPARE) system, run by WFP, to ensure that small regionally emergency humanitarian food reserves be available in order that the international community can respond rapidly to any emergency.

1. How will vulnerability be defined and isolated?
2. What is the proposed delivery channel?
3. Are regional stocks clever? *Weather problems are often common across a region and transport costs are typically lower directly from ports than between regional centres.*
4. Might PREPARE crowd out national food-security programmes? *(Coordination is desirable).*
5. The proposal gives little attention to the private sector. *In an emergency, we are only interested in getting food into stomachs. In preparing for possible emergencies, we should aim to ensure that local farmers and intermediaries take much of this responsibility.*

# What should the G20 agree?

Sir Humphrey Appleby would have said, “The G20 needs to agree something. PREPARE is ‘something’. Ergo, the G20 should agree PREPARE” OK, but PREPARE only deals with half the problem – how can countries respond to food crises, but not how can they avoid getting into food crises.

- This will involve WFP being less, not more, involved with direct food provision, but more involved in equipping and facilitating government and the private sector in LICs to take on a greater role.
- Intermediation of contracts can replace direct supply.
- WFP should assist with the management of national food security stocks and not duplicate these.
- It should measure its success in non-crisis periods by how little it does.
- If, nevertheless, a food crisis does emerge, WFP must be ready to act.
- PREPARE should be welcomed, but it should also be remitted for further consideration, even if this takes a few more months.