# 2. Managing Food Price Volatility: results of a two days workshop

## Discussions among about fifty experts with contrasted positions

C. Peter Timmer

I am grateful to have an opportunity to offer my observations on the two days of discussions we just completed at CIRAD, on the draft paper prepared by GREMA that Francoise has just summarized so effectively. "Managing food price volatility" is "my" topic. It has been my intellectual passion for over 40 years as an academic researcher, a teacher, and an advisor in the field, especially in Indonesia, China and Vietnam. We had rich and vigorous discussions on Monday and Tuesday and I hope to capture some of that flavor today

What does price instability have to do with food security? We all agreed that (in general),

- 1) Price *spikes* hurt poor consumers;
- 2) Price collapses hurt farmers; and
- 3) Price *risks* reduce investments, including by smallholder farmers for agricultural modernization.

But my own work suggests that food price instability also has a deeper and more insidious impact: it slows down economic growth and the structural transformation that is the pathway out of rural poverty. Thus food price instability really hurts the poor in both the short run and the long run.

Consider a very simple model of food security that focuses on the *short run* versus the *long run*, and on the *macro* level (of policymakers) versus the *micro* level (of household decision makers). When the food economy is reasonably stable (and this is only possible when the financial system is reasonably stable as well), macro policymakers can focus on long-run investments and policies for inclusive economic growth, and households can focus on building their skills, human capital and savings. The goal is to get to the "lower right" box where households have sustainable access to food in the long run. That is, they are food secure.

But, if the food economy is highly unstable, constantly in crisis, policymakers spend all of their time and budget resources in the "upper left" box, trying to stabilize food prices and provide safety nets for the poor. During food crises, vulnerable households often deplete their human and financial capital just to stay alive. This is the world of poverty

traps and enduring food insecurity. We are also trapped in short-run, macro and humanitarian *crisis management*.

How do we break out of these traps? Franck Galtier and his colleagues have designed a simple framework to think about managing food price instability. It builds on two critical distinctions: between *preventing* food price instability and *coping* with the consequences of unstable food prices; and between the role of the *private sector* in each domain and the *public sector*.

Thus there is a 2x2 matrix with 4 cells (just like my food security matrix), which he labels A, B, C and D.

|         | Prevent                                | Соре                      |
|---------|--|---------------------------|
|         | "A"                                    | "B"                       |
| Private | storage & transportation               | insurance                 |
|         |  | hedging & futures markets |
|         | "C"                                    | "D"                       |
| Public  | bufferstocks<br>import/export controls | safety nets               |

With the rise of market fundamentalism since the mid-1980s, most donor efforts have concentrated on A and B measures, and on D measures when food crises still erupted ("ABD" has a special meaning in US academia—"all but dissertation"—which means the student is "smart but not complete"). In view of the lack of success with the ABD approach, the issue at the workshop was whether approaches to "C" might work. Are there public interventions that could stabilize food prices?

We did not reach any specific conclusions, but we clarified the issues considerably. I will use a simple framework to explain our discussions:

There are four levels of action: Local, national, regional and international. Although the background paper focuses mainly on the distinction between national and international actions, our discussions included significant examples where farmer organizations at the local level and regional bodies such as ASEAN+3 have engaged in price stabilization initiatives.

Within these four levels of action, we discussed five main issues, and they were often specific to one of the levels of action just presented.

## Where is price instability a problem?

At the local level, highly unstable farm gate prices are a significant burden to small farmers seeking to invest in modern agricultural techniques and raise their productivity. Consuming households (and many smallholder farm households are net consumers) are obviously the locus of burdens from high food prices and especially from price spikes.

At the national level, the concern is for price stability in major urban markets and is often the focus of action by macro policymakers.

At the international level, the concern is for the level and stability of food prices from the major exporters, and the possibility that export barriers might prevent access to food by importing countries in times of rising prices.

#### Which commodities need more stable prices?

Our discussion focused on three categories of agricultural commodities: food staples, cash crops and perennial tree crops. Prices of cash crops are a real concern to farmers but have relatively little impact on consumers. Similarly, perennial tree crops present special financing problems because of the long time horizon for the investment to start to pay off, and there is such a sharp distinction between short-run marginal costs and long-run average costs, but price variability has little impact on consumers.

Accordingly, most of our discussion was on price stabilization techniques for the major staple food grains, especially rice, wheat and maize. Although these commodities have much in common because they often form a large share of energy input among the poor, there was a clear recognition that the world rice market behaves very differently from the world markets for wheat and maize. There are other food grain markets with their own unusual trading regimes: cassava, millet and white maize, for example, often behave more like "non-tradable" commodities than the tradable commodities with large, liquid international markets. Any efforts to stabilize food grain prices will need to recognize the special characteristics of individual commodities.

### What instruments are available to stabilize food prices?

We discussed three main categories of stabilization instruments: border (trade) controls, buffer (reserve) stocks, and regulation of financial markets involving agricultural commodities.

Border controls are a national issue because nations are defined by their borders. Economists do not like political borders very much because they impede the free flow of goods and services (and hence reduce the "gains to trade"), but the nation state is the main modern actor in many areas of economic, political and diplomatic initiatives. Borders, and border controls over trade, are a reality. The WTO seeks to impose disciplines on what border controls are legitimate, and agriculture has been included in those disciplines since the Uruguay Round, but the food crisis in 2007/08 revealed a serious asymmetry in how the WTO approaches border controls for food grains. Virtually all of the trade disciplines, and all of the current negotiations under the Doha Round, refer to import barriers rather than export controls. There was wide agreement at our workshop that export controls on food grains have been a significant source of price instability. The asymmetry of trade discussions should be rectified, but it is difficult to imagine grain exporting countries agreeing to significant restrictions on their ability to control exports as a means of stabilizing their domestic food prices. Food security is simply too important as a political mandate for national leaders to forgo this policy instrument.

Large reserves of grain, at whatever level, have the obvious advantage that they can be drawn on when harvests are damaged or there are surges in demand. Large reserves tend to hold price levels down as well, although there is a clear endogenous relationship, explained by the theory of supply of storage, between expectations of price changes and levels of stocks held by the private sector. The issue is whether the public sector should be holding reserve stocks of grain above and beyond the willingness of the

private sector to hold stocks (and the subsequent willingness of the private sector to hold these stocks in the presence of public stocks).

Holding public reserve stocks faces three key issues: their *costs* (and who should pay), *monitoring* the level and quality of stocks (and who should manage them), and *enforcement* of agreements to buy and release stocks according to some transparent rules. Each of these issues has been difficult to resolve even in the case of national stocks. There is virtually no experience at the international level of procuring, managing and releasing reserve stocks on behalf of an agreed protocol to stabilize grain prices. The experience of using Japanese "WTO" rice stocks in 2008 as an external supply source to prick the rapidly rising spike in world rice prices was clearly a unique episode (and even then the stocks were never actually released). Very serious doubts were expressed at the workshop that any internationally viable scheme of holding reserve stocks of grain for stabilization purposes could be agreed and implemented.

Regulation of financial markets for agricultural commodities was vigorously discussed, with attention focused on two possibilities: re-imposition of position limits on speculative positions for important food commodities traded on futures markets (such as existed before the financial deregulations in the 1990s), and a "Tobin-tax" on each financial transaction to slow the emergence of speculative bubbles. The difficulties with either approach were clear—many of the financial transactions in commodity markets do not actually take place on organized exchanges were regulators can see what is happening, no single market could initiate such regulations unless others around the world did as well, and there is no experience with taxing financial transactions of this sort. Still, it was recognized that the "financialization of food commodities" is a relatively recent and rapidly growing phenomenon and urgently needs more research and understanding.

#### How can stabilization interventions be governed?

The issue is important at three different levels (four, if the regional level is somehow distinct from the international level because of greater commonality of interests).

At the local level, especially for farm or community organizations, governance would seem to depend on active participation and "voice." The great advantage of local initiatives, of course, is precisely their ability to be responsive to local conditions and aspirations. General guidelines on how to manage them are probably not very useful.

At the national level, democratic processes are widely thought to be the basis of good governance generally, and should provide appropriate feedback to national leaders on how well they are doing in managing the country's food security. Still, it is important for outside analysts, donors and the private sector to realize that food security is inherently a political issue subject to political decision making. It is certainly desirable that good technical analysis, especially economic analysis, be brought to bear on these decisions, but history has shown how difficult it is to make such analyses relevant and implemented.

At the international (and regional) level, negotiations informed by transparent technical rules would seem to be the best way forward. But there was deep skepticism at the workshop that such negotiations could be successful.

#### How do we evaluate success or failure in stabilizing food prices?

At the local level, the basic issue is whether sustained gains are seen in agricultural productivity on small holder farms. Of course, many other ingredients are needed for "getting agriculture moving," but a major rationale for stabilizing commodity prices at the farm gate is to enhance the profitability of these other investments. The feedback from success at this level is also critical: nothing would improve the outlook for food security more effectively than rapid increases in farm productivity, especially for staple food crops grown by small holders.

At the national level, success in stabilizing food prices is likely to be seen primarily in greater political support for the government that gets credit, and ultimately in a more stable investment climate that should stimulate economic growth. Although the political payoff is likely to be primarily in the short run, the contribution to economic growth will only be apparent to economic historians, and to the country's consumers as they gradually escape from poverty.

At the international level, if a price stabilization accord can be agreed and implemented, success will almost certainly have to be measured using technically sophisticated but transparent methodologies that are part of the initial framework. Cost-benefit analysis is a powerful tool when stakeholders agree on the result.

Our conclusion? Reducing food price volatility is likely to be a highly specific process—depending on commodity, country, and global market conditions—but we should encourage countries in this process, NOT discourage them.

Some final thoughts, after the questions: There are some broad lessons, even when viewed through my "rice lens." Rice has not been "financialized," but there are still speculative hoarding episodes driven by widespread expectations of scarcity and surplus. At the country level, prices WILL be stabilized (or at least serious efforts will be made to do so). The issue going forward is whether these country efforts can be done in a way that has less impact on world prices. The most promising avenue in this regard is regional agreements on rice reserves (ASEAN+3), but these need a price stabilization objective as well as an "emergency" objective.