FONDATION POUR LES ÉTUDES ET RECHERCHES SUR LE DÉVELOPPEMENT INTERNATIONAL

Achieving food security: Focusing on the process to coordinate instruments

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Widespread concerns with food security in developing countries

With food prices again at a record high level and highly volatile, food security has become an issue of major concern for both the international community and national governments. At the Davos meeting, World Bank President Zoellick when asked what was, in his opinion, the biggest challenge facing the developing world in 2011 responded that it is "the risk of a big boost in food prices", explaining that "when prices of staple foods soar, poor countries and poor people bear the brunt".

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···/··· Rising food prices are also a major contributor to inflationary pressures in developing and emerging economies, threatening the sustainability of growth. President Sarkozy selected as priority issue for his 2011 presidency of the G8 and G20 the issue of food security. The FAO along with several other international organizations responded by calling on international expertise to advise the world nations' Committee on Food Security on ways of managing food price volatility and coordinating policy responses to food price shocks. The World Bank doubled its 2004 level of investment in agriculture to $8 billion, while the G8 and the Bill and Melinda Gates Foundation endowed a Global Agriculture and Food Security Program. The BRIC countries are also stepping forward with their own aid programs: China and India are investing in natural resource industries including agriculture in Africa, Brazil has stepped up a technology transfer program to Africa, and Russia is in the process of establishing a Eurasian Center for Food Security as part of its G8 commitments. Private sector investments in agriculture have also boomed. UNCTAD reported a four fold increase in FDI in agricultural production following the food crisis.

While OECD deliveries of aid to agriculture are lagging relative to commitments––in part as a consequence of fiscal austerity required by huge deficit financing used to respond to the financial crisis of 2008-09––, two things are clear: one is that concern with food security in developing countries is at an all time high, creating a favorable context to propose international and national policy initiatives; the other is that willingness by the international community to contribute funding and expertise to help address this situation offers the unique opportunity of implementing new initiatives to address food insecurity in both the short and the longer run. This opportunity should not be missed. How to seize it is, however, much less clear. This is what we address in this Policy Brief, considering only approaches that can be defined and implemented at the national level.

A sharp contrast between success in fighting poverty and fighting hunger

A revealing observation is that there is a sharp contrast in official statistics between progress in reducing poverty and in reducing hunger. While extreme poverty (defined as a per capita consumption expenditure of less than PPP$1/day) has declined steadily from 1.9 billion in 1981 to 1.4 billion in 2005, chronic hunger has remained stable around 900 million since 1981 and jumped to 1 billion in 2009 (Figure 1). The way these statistics are calculated may be questioned, but this would likely affect levels rather than trends. Why hunger has been on the rise while poverty has fallen can be linked to a number of hypotheses, but it undoubtedly reflects one major reality: it is much harder to reduce hunger than it is to reduce poverty. Successful poverty reduction strategies have basically relied on two instruments: labor intensive growth (with smallholder agriculture particularly propitious for this) and well targeted social safety nets. Successful hunger reduction calls upon a much broader array of instruments, and even pro-poor growth has been observed to be much less effective for hunger reduction than it is for poverty reduction.

This sharp contrast between poverty and hunger reduction tells us that meeting current concerns with food insecurity in developing countries will require different approaches than those that have been tried over the last three decades. This is the current challenge being addressed by the G20 and other international coalitions and organizations.

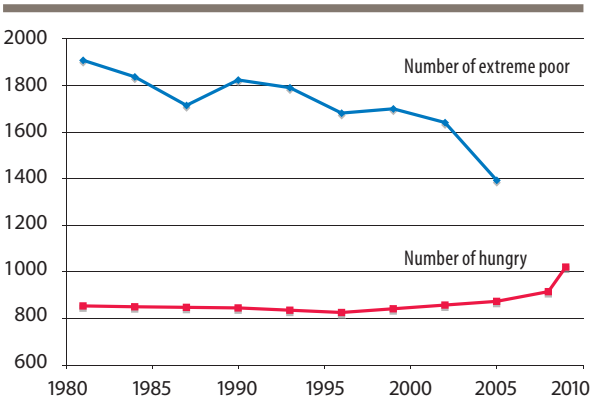

Figure 1: Contrasted trends in extreme poverty and hunger

Data sources: Hunger: FAO, *The State of Food Insecurity in the World*. Economic and Social Development Department, 2010. Poverty: Chen, Shaohua, and Martin Ravallion. 2008. *The Developing World Is Poorer Than We Thought, But No Less Successful in the Fight against Poverty*. Policy Research Working Paper 4703, Development Research Group, The World Bank.

A multiplicity of reports to address the food insecurity issue

Naturally, as the international community mobilizes behind the food security issue, a large number of reports have offered diagnostics of the state of food insecurity, attempted to identify its determinants, and suggested potential approaches to more successfully combat it. Contributors to this effort include in particular the World Bank, the OECD, the FAO, IFAD, IFPRI, CIRAD, DFID, etc. These reports are very useful because they bring information about how different countries have tried to address their food security problem, and have introduced new instruments that can be used for this purpose. They also clearly remind us of the tremendous complexity of the world hunger problem and the vast array of instruments that can be mobilized for this purpose.

Two observations derive from inspecting this rich literature. The first is that there are a number of fundamental dilemmas that require policy choices to be made. In other words, there is no superior policy course, but important policy trade-offs to be addressed and decided upon. Some of the fundamental food security policy dilemmas that need policy decisions are the following:

1. There exists an age-old dilemma in "getting the food prices right": they should be low for consumers to reduce hunger and increase real incomes; but they should be high for farm producers in creating incentives to invest to increase total factor productivity and induce factor deepening. This is reflected in a dilemma in public budget priorities: whether to focus on short run cheap food for consumers––the urban bias––or on long run agricultural productivity gains for producers, with the expectation of future lower prices for consumers through the treadmill effect in technology adoption.

2. There exists a basic trade policy dilemma between using greater food self-sufficiency to shelter oneself from international price fluctuations, and greater use of comparative advantage and trade to protect oneself from domestic fluctuations in production.

3. There exists heterogeneity among rural poor farmers, with net sellers benefiting from higher prices and net buyers benefiting from lower prices. Hence, with rural poverty accounting for some 75% of world poverty, and a majority of the rural poor on the net-buyer side of the market, using higher prices to induce productivity growth in agriculture will meet with strong concerns with rural welfare.

4. There exists a basic policy dilemma in selecting policy instruments to reduce price volatility: should this be done through markets or directly through state interventions? Each is associated with strong ideological attachments. At the same time, it is clear that both state and market (public and private sectors) each have unique roles to play, and that an optimal balance between the roles of state and market needs to carefully established, seeking complementarities such as public-private partnerships as opposed to ineffective competing interventions.

5. The exits numerous joint outcomes that can sometimes be managed as win-win, but more frequently imply trade-offs, such as between productivity gains (use of agro-chemicals) and

health; intensification (monoculture, GMO) and environmental degradation (loss of biodiversity); irrigation and malaria; land expansion and deforestation, etc.

Existence of these food security policy dilemmas has one obvious implication: countries need to have the ability to assess trade-offs, diagnose opportunity costs, plan alternative options, coordinate interventions, and achieve broad popular ownership for the strategy selected to achieve food security.

The second observation is that a large array of policy instruments exists to address particular food security issues. If we characterize the causes of food security in terms of availability, access, and use of food; the types of food insecurity as chronic and transitory; and the categories of policy instruments that can be used to address food insecurity as interventions through the market and direct state interventions, we have a policy matrix as represented in Figure 2. Focusing only on transitory food insecurity, that is most closely associated with price volatility, policy can be directed at reducing price volatility, at managing the impacts of food insecurity ex-ante relative to shocks––shocks originating in the triple crisis of price (food crisis), income (financial crisis), and production especially as affected by weather (climate change crisis)––, and at coping with such shocks ex-post relative to their occurrence. For the first, basic policy interventions have the purpose of making markets work better to stabilize prices and of stabilizing prices through interventions such as food reserves, trade interventions, and consumer subsidies. Risk management can be addressed via new financial products made available through the market such as index-based weather insurance and futures contracts, or through greater resilience of subsistence farming. And risk-coping can be achieved through emergency loan programs, or through a vast array of social assistance programs to individuals vulnerable to transitory hunger.

The main lessons derived from this categorization of policy instruments is that each country will have to carefully determine its own policy mix, that there are trade-offs involved with losers and gainers, and that this policy mix will change as the food security context itself continuously changes. Hence countries need to put into place a process that will enable them to assess, plan, and implement their own policy mix.

Type of food insecurity	Type of policy instrument	Causes of food insecurity			
		Lack of availability of food (Supply-side)	Lack of access to food (Demand-side, direct access)		Misuse of food (household)
Chronic insecurity	Interventions through markets	**Make markets work better in time and space** Market intelligence Trade liberalization Reduce transactions costs on markets Increase competition Commodity exchange	**Aggregate economic growth** Employment opportunities		
	Direct state interventions	**Invest in agriculture for productivity gains** **Long term food aid** **Biofortification of staple foods**	**Income generation programs** Acces to assets (land, education) Improve the context where the assets are used Employment in the rural non-farm economy **Social assistance programs for the chronic poor** Cash and food transfer programs (vouchers, CCT) Workfare programs Mother and child health and nutrition programs **Enhance productivity in smallholder farming** Production for home consumption Peri-urban gardens plots Local purchase for social programs Input subsidies		**Home economics and nutrition training** Safe water and sanitation Vaccination micronutrients
Transitory insecurity	Interventions through markets	**Make markets work better in time and space** Information on production and stocks Facilitate private storage Futures markets	**Risk management (ex-ante relative to shocks)** **New financial products** Crop/livestock insurance (index-based) Savings instruments and incentives to save	**Risk coping (ex-post relative to shocks)** **Emergency loan programs**	
	Direct state interventions	**Intervene in markets to stabilize prices** Public food reserves Trade interventions, price bands	**Enhance production in smallholder farming** Resilience of production systems Input subsidies	**Social assistance for vulnerable individuals (quick response programs)** School meal programs Targeted cash and food transfer programs (vouchers, CCT) Workfare programs (guarenteed employment), productive safety nets (CDD) Programs to prevent the decapitalization of productive assets	**Emergency feeding practices**

Figure 2: Food security in developing countries: Policy instruments

From poverty reduction to food insecurity reduction

Success in poverty reduction, and complexity in addressing food security with limited success, means that we may learn something from the first, and seek a comparable strategy for the second.

The design of anti-poverty approaches largely followed four steps:

1. A data collection effort through periodic household income and expenditure surveys (Living Standards Measurement Surveys or LSMS at the World Bank) to inform the current and changing status of households regarding income achievements and poverty conditions.

2. An analytical effort through the Poverty and Inequality Assessments, with a set of widely shared indicators and causal analyses. These assessments should yield a set of policy options that can be offered for open debates and consultations.

3. A broad consultative process, initially managed through the PRSP (Poverty Reduction Strategy Papers), equivalent to an indicative planning exercise with broad consultations and deliberations with the private sector, civil society organizations, and branches of government.

4. Implementation of the strategy with support from international donors, expectedly committed to provide support if the strategy had been designed according to established norms and standards of analytical rigor and broad ownership.

Several countries have well developed planning mechanisms to address their food security concerns. Most elaborate may be Brazil's Zero Hunger strategy that cuts across a wide array of policy instruments, and involves a multiplicity of branches of government. In Sub-Saharan Africa, the CAADP (Comprehensive Africa Agriculture Development Program under NEPAD) provides guidelines for the development of comprehensive agricultural strategies. They fall short of extending to food security strategies, but they provide an important stepping stone toward the latter. In general, whatever effort is made to assist countries develop **a comprehensive food security strategy** would have to build on existing institutions and efforts in that direction, not compete with those. Because there are economies of scale in the provision of public goods and in the construction of markets, a regional approach will often be needed, especially for small and landlocked countries. Regional organizations are in place that can be used for this purpose.

The proposed approach to designing a food security strategy that would help countries define their portfolio of policy instruments would thus consist in four steps, by analogy with the poverty reduction approach:

1. A data collection effort (largely secondary data, but also some purposeful survey data collection) analogous to the LSMS to assemble the information needed to characterize the state of agriculture and food security for the country/region. The LSMS-Gates National Panel Survey effort is an important step in that direction for a dozen countries.

2. An analytical effort to develop indicators of food insecurity, diagnose causalities, and conduct impact assessments of past or on-going initiatives. The outcome of this analytical effort will be a Food Security Assessment with a set of options that the country can consider and present for debate to concerned parties.

3. An open consultation that brings into deliberation over these policy options the private sector, civil society organizations, and relevant branches of government. The outcome of this consultation would be a broadly owned short- and medium-term strategy to address food security, combining and coordinating in an effective fashion a vast array of instruments and the corresponding actors. If the exercise generates efficiency gains through better coordination of both national and international actors, the gains in food security can be achieved at zero additional cost.

4. Implementation of the strategy through improved used of the fiscal budget and donor assistance. By analogy with the Millennium Challenge Corporation approach, and new approaches to foreign aid that reward good governance, donors would commit to supporting the national strategy if it has been developed according to agreed upon norms.

A proposal for action

Focusing on the process whereby a national food security strategy is elaborated and implemented––capitalizing on the lessons derived from successful approaches to poverty reduction––brings together instruments that are largely known in a piecemeal fashion and should in as much as possible build on existing institutions and efforts. This could be experimented with in 2-3 pilot countries where interest exists, food security is a huge efficiency and welfare problem, a large potential gain could be achieved through improved data collection, analysis, consultation, and strategic planning, and international donor interest exists. The main short run product would be the process itself. Monitoring of the process will help learn-by-doing and improve the approach as it is being used.

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