

The Continuing Food Crisis

Global Policy Reforms Lag

TIMOTHY A WISE, SOPHIA MURPHY

The recent food price crisis has exposed the fragility of the global food system. There has been much progress in international policies and practices on food and agricultural development, but some of the underlying causes of the crisis have yet to be addressed. The focus continues to be on increasing production with little regard for demand-side aspects (biofuels, meat-based diets, etc) and inequality in consumption. Developing country governments will be central to bringing about such changes. They need the policy space to pursue their own solutions and they need the support of the international community to demand deeper reform in developed country policies.

This article is based on the authors' report, "Resolving the Food Crisis: Assessing Global Policy Reforms since 2007", published by the Institute for Agriculture and Trade Policy and Tufts University's Global Development and Environment Institute. It is available at: http://www.ase.tufts.edu/gdae/policy_research/resolving_food_crisis.html

Timothy A Wise (tim.wise@tufts.edu) is the research and policy programme director at the Global Development and Environment Institute, United States. Sophia Murphy is a senior adviser at the Institute for Agriculture and Trade Policy, US.

The world is now nearly five years into what has come to be known as the "food crisis", sparked in 2007 by rapid spikes in international prices for basic commodities. Commodity prices doubled, the estimated number of hungry people topped one billion, and food riots erupted in more than 30 countries. A second price spike in 2010-11 drove home that this was not a one-off event, that the policies and principles guiding agricultural development and food security are deeply flawed. The global food import bill for 2011 soared to an astonishing \$1.3 trillion. There is now widespread agreement that international agricultural prices will remain significantly higher than pre-crisis levels for at least the next decade.

The crisis prompted a flurry of activity at the international level, from the United Nations (UN) agencies to the World Bank to the G-20. While the crisis reversed a long-run decline in support for agricultural development, the major governments and institutions are yet to address the structural shift caused by the deepening integration of food, fuel, and financial markets in a resource-constrained world made more vulnerable by climate change.

In the last six months, the G-20 failed to take decisive action on its ambitious food security agenda, governments at the World Trade Organisation (WTO) refused to tackle damaging trade policies, and rich country resistance prevented strong action on climate change at the Durban summit in December 2011. Nearly five years into the crisis, we examine what has really changed – and what has not.

A Wake-up Call on Food Security

The crisis awakened the global community in the way only food riots seem to do. We witnessed a flurry of activity at the international level. In April 2008 the UN

Secretary General named a High Level Task Force (HLTF) on the Global Food Security Crisis, which brought together the heads of UN agencies, the World Bank, International Monetary Fund, WTO, and Organisation for Economic Cooperation and Development (OECD). They developed a two-track approach based on the Food and Agriculture Organisation of the United Nations (FAO) existing Anti-Hunger Programme, which focused on assisting vulnerable populations and building "resilience". The FAO created its Initiative on Soaring Food Prices to stimulate food production and assist small-scale producers. The FAO also took the lead in overseeing the rapid re-formation of the Committee on World Food Security (CFS) to serve as the multi-stakeholder coordinating body for the international response to the food price crisis.

Donor countries stepped up as well. The G-8 countries in 2009 committed \$22 billion over three years for developing country agricultural investment, leading to the creation of the Global Agriculture and Food Security Programme (GAFSP) to serve as a central fund for longer term agricultural investment in developing countries. The World Bank in 2010 developed a three-year Agricultural Action Plan, with a commitment to raise funding levels from \$4.1 billion/year to between \$6.2 and \$8.3 billion/year. G-20 leaders subsequently made food security one of their priority areas. That agenda came to include, under France's leadership in 2010, addressing commodity price volatility and speculation, slowing land grabs by promoting "responsible agricultural investment", and reviewing nutrition and humanitarian aid.

Developing country governments did not wait for permission from donors to take their own new approaches to food security and agricultural development. Some were defensive, reacting to the restrictions on exports that a number of exporting countries put in place to ensure domestic supplies, which exacerbated the price spikes. Others signalled a more fundamental shift, as a number of poor net-food importing countries adopted new policies to reduce their dependence on food

imports. African governments reaffirmed earlier commitments to increase agricultural development budgets to at least 10% of government expenditures (Mousseau 2010). And new South-South cooperation took shape, such as Brazil's support for agricultural research in Africa.

Suddenly, the major policy issues were front and centre: public agricultural investment, small-scale producers and women in agriculture, commodity speculation and volatility, food reserves, sustainable vs high-input agriculture, climate change and its impact on food production, biofuels expansion and its impact on food prices.

Progress, But Not Enough

There is no doubt that the food crisis was an important catalyst for change. It prompted major international institutions to reverse the long-standing neglect of agriculture as a vital economic sector, shone a light on the important role of small-scale farmers and women, and, forced governments to at least acknowledge the weaknesses inherent in international markets and the important role developing country governments play in addressing those market failures. International institutions also showed new recognition for environmental issues, including climate change, but also freshwater scarcity, biodiversity loss and the erosion of soil fertility.

But we see neither the necessary urgency nor the willingness to address the need for re-regulation of markets, nor to discipline the behaviour of agricultural exporters and the agribusinesses that control international markets. There has been a structural shift in global markets, with the integration of agricultural, energy, and financial markets. Industrial biofuels expansion, supported by hefty subsidies and incentives, now ties food prices more closely to high and volatile oil prices. Financial speculation in still deregulated commodity futures markets adds further volatility. Reforms are yet to address these realities.

The world needs policies that discourage biofuels expansion, regulate financial speculation, limit irresponsible land investments, encourage the use of buffer stocks, move away from fossil fuel dependence and towards agro-ecological practices,

and reform global agricultural trade rules to support rather than undermine food security objectives. In all the flurry of activity since 2008, there has been very little done towards these objectives. The world is still at risk of another devastating run-up in food prices. Following is an assessment of the policy reforms to date.

Funding: Some New Wine, Mostly Old Bottles

There is no question that donor countries, international institutions, developing country governments, and private philanthropies have increased the amount and share of spending on agriculture and rural development (ARD), even though it is difficult to quantify that increase with much accuracy. Donor countries are committing more resources, and ARD now assumes a higher priority in the lending of the World Bank and the regional development banks, an important shift after years of declining support. Agricultural research through the Consultative Group of International Agricultural Research (CGIAR) institutions has been reformed and is once again increasing, though with heavy dependence on private funds and transnational agribusiness firms. Private philanthropies, led by the Gates Foundation, have made agricultural development a top priority. Most importantly, developing country governments have responded by raising their own commitments to ARD, including through the Comprehensive African Agricultural Development Programme (CAADP).

Still, even at current levels, support for ARD is not enough to meet the challenges posed by the global food crisis. International Food Policy Research Institute (IFPRI) estimated in 2008 that to achieve the millennium development goal of halving poverty and hunger it would require at least \$14 billion per year in public funding (national and international) above prevailing levels, and this just for irrigation, seed research, and rural infrastructure. A much-needed input-financing programme would cost another \$2.3 billion, just for sub-Saharan Africa (Fan and Rosegrant 2008). This suggests that the need for public investment still exceeds the amount pledged by a large margin.

Is the money being spent in new ways? This is even more difficult to discern, since many of the programmes are new and few have been fully evaluated. Here are some preliminary conclusions:

- Support for “country-led” programmes: The Rome Principle of support for country-led programmes is now more widely accepted and practised, and has resulted in improved ARD programmes through such efforts as CAADP.

- State role in agricultural development: Linked to country-led programmes, recent ARD investments show renewed recognition of the importance of the state in agricultural development, a noteworthy shift from previous attempts to reduce the state role in the economy. Still, there remains a strong bias towards the private sector, which increasingly takes the form of public-private partnerships. These are problematic when the public sector is weak or when the role of the public sector is simply to insure private investors against risk. In some countries, the private sector is too weak to contribute.

- Small-scale and women farmers: Small-scale farmers figure much more prominently in agricultural programme objectives than they did before the crisis, and women, too, though to a lesser extent. It is still not enough. Not surprisingly, many programmes that favour small-scale farmers exclude those not considered “commercially viable”, leaving many unsupported. An evaluation of British aid programmes came to this conclusion and urged a more inclusive approach (Wyeth and Ashley 2009).

- Little evidence of shift towards low-input agriculture: While many of the country-led programmes say they support efforts to encourage low-input, diversified, and more sustainable agricultural models, there is little evidence that the recent surge in ARD funding explicitly favours such programmes, and clear evidence that industrial agriculture continues to command a significant share of the spending.

- Prevailing bias towards external technologies: Improved seeds are important for agricultural development, but the bias in research, development and extension is on commercial hybrids and biotechnology rather than the improvement of native seeds and local food crops. There are notable

exceptions, but most programmes still tend to promote the importation of commercial seeds, with the reliance on external inputs they imply. Native seeds remain an important and underutilised source of biodiversity and resilience, which will be critical in the face of climate change and are essential if farmers are to retain more economic control of the value of their production.

- Little evidence of priority on domestic food markets: There is little indication that the priority in international programmes has shifted towards ARD for domestic food markets. Country-led projects may well emphasise food production for local and regional consumption, in which case these will get more support than before, but the bias in international funding seems to be towards production of cash crops to promote the integration into global commodity chains. To the extent ARD projects focus on better integrating small-scale farmers into global, national, and commercial retail markets, this bias will go unchallenged. The evident risks of increasing small-scale producers' exposure to the volatility of international markets is nowhere satisfactorily addressed in donor programmes, with the exception of some initiatives by the World Food Programme (WFP), FAO and others to build warehouse receipts systems to hold grain at the village level, and the WFP programmes that source food from small-scale producers for use in regional programmes.

Transition to Agro-Ecology

Agricultural development must operate within increasingly severe natural resource constraints. Yet long-term agricultural development strategies continue to emphasise new "green revolution" approaches, such as in the well-funded Alliance for a Green Revolution in Africa (AGRA) programme, with support from Monsanto and other transnational firms that benefit from such programmes. ARD programmes fall well short of promoting a meaningful and rapid transition to more sustainable agricultural systems. Responses to the recent crisis have focused primarily on productivity increases achieved in the short run through the increased application of chemical fertilisers and in the medium term through more

widespread use of improved seeds. These approaches deepen farmers' dependence on external inputs that have too often proved unaffordable. Fertiliser prices increased more than those of most other commodities during the food price crisis of 2007-08. Fossil fuel-based chemical and fertiliser prices are projected to continue increasing. They are also a significant source of greenhouse gas emissions.

There are notable and encouraging alternative approaches, well-documented by the multi-agency International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD 2009a). A project funded by the new GAFSP in Rwanda makes good use of local resources and knowledge to raise food production for farmers and local markets while improving resource management (Watkins 2011). Impressive gains have been documented in the widely lauded strategy of "sustainable intensification" using a varied array of methods tailored to local conditions (Pretty et al 2011).

The director of the IAASTD secretariat, Robert Watson, summarised the main lesson from the report: "Business as usual is not an option" (IAASTD 2009b). Unfortunately, the evidence suggests that despite encouraging exceptions, the international community has not accepted the need to aggressively promote a transition to environmentally sustainable, low-input agriculture.

Impact of Energy Crops

One of the most disappointing policy failures in response to the global food price crisis has been the refusal of the United States (US) and the European Union (EU) to reconsider their support for the expansion of energy crop production and the diversion of land from growing food crops to biofuel feedstock. Besides the two recent price spikes, we have seen a general rise in agricultural commodity prices in recent years, that most analysts presume will persist for at least the next decade. There is near consensus among researchers that the expansion of corn ethanol and biodiesel are important contributors to these food price increases, raising demand for crops, land and water at a time when inventories are tight

(see, for example, Abbott et al 2011; Lagi et al 2011). Most commentators also agree that the net carbon benefits of many biofuels are at best limited (see, for example, Sims et al 2008).

The US and the EU encourage expansion with policies that protect, subsidise, or mandate the use of biofuels, policies that could be reversed or eliminated. While the US ended tariff protection for corn ethanol and associated subsidies in December 2011, it still mandates a minimum use that creates an inflated market for ethanol. It is true that as oil prices rise, removing support policies is less likely to stop biofuels expansion.

Many of the international agencies' own commissioned research have called for such reforms. The G-20's Interagency Task Force paper on food price volatility said G-20 governments should reconsider biofuels policies (FAO, OECD et al 2011). The UN's High Level Panel of Experts (HLPE) paper on volatility was equally clear (HLPE 2011). IFPRI has long had such reforms near the top of its list of needed responses to the food price crisis (Fan et al 2011). Yet action remains elusive. The G-20 agricultural ministers ignored the advice of their commissioned expert report, saying only, "We recognise the need to further analyse" the issue (G-20 Agriculture Ministers 2011: 10). G-20 heads of state followed suit.

This tepid response perhaps accounts for the failure of biofuel-related proposals at the UN. The CFS followed the G-20 lead on the issue, calling only for more study. This is not an area that needs more study. A number of economists have shown conclusively that a few governments have put in place support programmes for industrial biofuel production and use that have had a demonstrable effect in raising global food prices. The limited steps to amend biofuels policy taken to date are not sufficient.

Price Volatility

Food price volatility is recognised as a problem by all the institutions we reviewed. It was the centerpiece of French President Sarkozy's leadership of the G-20 last year. Yet little has been done. The two most important reforms would be the development of publicly held food reserves

and the tight regulation of financial speculation on commodities markets.

Reserves are slowly reappearing on the global policy agenda, after several decades in the policy wilderness. Reserves offer an excellent way to both limit price volatility (low stocks are a necessary condition for excessive volatility) and to provide a buffer supply if production shortfalls occur (at home or on the international market). The countries that maintained reserves were better able to moderate international price spikes.

In fact, reserves are in many ways necessary for international markets to function properly. The WTO can exhort exporting countries not to impose export restrictions in a crisis, as many did in 2007-08, but those governments' first obligation is to protect their own citizens. If they feel adequate supplies are not secure, they will restrict exports. With the private sector holding very low inventories, publicly held reserves allow markets to function by preventing panic, either in the form of export restrictions or through emergency purchases by import-dependent countries, as the Philippines did in 2007-08 (Timmer 2011).

IFPRI has been clear in its calls for food reserves (von Braun and Torero 2009). But the World Bank and the G-20 have generally rejected the use of reserves to moderate volatility. The G-20 approved a pilot project under WFP auspices to experiment with an emergency food reserve in west Africa, which offers an important step forward but has yet to be implemented and even then would remain limited in scope and capacity. In October 2011, the CFS called for a review of the uses and effects of reserves. No further action on this call has yet been decided. Many countries actively maintain food reserves, and the international community needs to build on these efforts rather than constrain the use of reserves.

We have seen similar inaction when it comes to curbing financial speculation. Economists continue to argue about the extent to which speculation on commodity markets accounts for price volatility. The G-20 acknowledged that there is a problem but have not been able to agree on a firm policy response. The issue is deferred to Mexico's chairmanship of

the G-20 in 2012. Meanwhile, the only concrete actions relate to market transparency rather than regulation. Yet a growing body of literature shows strong links between the increase in commodity market speculation and the recent spikes in food prices (Ghosh 2009; Chowdhury 2011; UNCTAD 2011). Others dissent (see, for example, Gilbert and Morgan 2010).

The UN's High Level Panel of Experts recommends a precautionary approach: first, do no harm. The financial actors, from banks to the multinational grain traders to private investors, clearly stand to gain from deregulation (and some, too, will lose). What is not proven is that there is any gain for the public interest, while the costs and risks are clear and have significant implications for people's access to food (HLPE 2011).

Ultimately, speculation is controlled by national law in a handful of countries; the US and the UK are the most prominent, but there are also grain exchanges in South Africa, in France, and in some other countries around the globe. Reform efforts have been slow, meeting strong resistance from financial firms, as with the Dodd-Frank bill in the US. Now that most of the world's poorest countries are dependent on food imports to meet an important share of their food needs, the implications of unchecked speculation in the short term have to be taken into account. It will take strong re-regulation of financial markets, not their expansion through World Bank-sponsored risk management hedge funds, to insulate agricultural markets from price bubbles such as we have seen in recent years.

'Land Grabs'

There is a clear consensus that foreign land acquisitions – "land grabs" – represent a major threat to food security. They are driven largely by sovereign wealth funds in some richer developing countries that wish to ensure long-term access to food by leasing or buying arable land abroad; by biofuel producers looking to produce feedstock; and, by international investors speculating on land and the water beneath it. The problem is notoriously hard to document. A recent Oxfam report uses data from the collaborative

Land Matrix Partnership to estimate that as many as 227 million hectares of land has been sold or leased since 2001, mostly to international investors, with the bulk of these land acquisitions occurring over the past two years (Zagema 2011). The scale dwarfs overseas development assistance to agriculture; the Donor Platform estimated foreign land acquisitions were worth \$91 billion 2008 alone, the year the phenomenon first exploded (Platform 2010: 9-11).

Oxfam has called this trend "development in reverse". While developing country agriculture is starved of capital, the leases and sales tie up food-producing resources far into the future, taking land that would have been available for food production (not always cultivated crops) out of the local communities' control. The agriculture practised on the land is generally capital-intensive, high-input monoculture, creating few jobs and undermining efforts to move food systems to a more environmentally sustainable path. Where land tenure is collective, poorly defined, or poorly enforced, the contracts dispossess people who have no alternative means of making a living.

The international response has been woefully inadequate to the urgency of this trend. There is broad consensus that it poses serious problems. One response is the World Bank's proposed Principles for Responsible Agricultural Investment (PRAI), but they have been widely criticised as too weak. More promising, and now given priority in the international system, are the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forest, in negotiation under the auspices of the CFS at the UN. The working draft, which was discussed in October 2011 and is expected to be adopted in 2012, is far more comprehensive than the PRAI. Such an approach is closely in line with the "right to food" approach advocated by the UN Special Rapporteur on the Right to Food (De Schutter 2011a).

The Voluntary Guidelines are an important and positive initiative, but governments are not expected to ratify them before late 2012 and they will be voluntary. In the meantime, it will fall to investing-country governments to insist

on high standards and stronger policies for such investments and on receiving-country governments to take actions to protect their land, national resources, and rural populations. Some have already imposed moratoria on foreign land sales to allow governments to establish better norms and oversight (see, for example, Oakland Institute 2011a, 2011b). And the African Union has proposed its own guidelines to slow the land sales (CFS 2011).

Climate Change and Agriculture

As agriculture assumes greater importance within global climate negotiations, climate change is also receiving greater attention among institutions, governments and donors concerned with agricultural development. It is remarkable, in fact, how much attention the issue gets in institutional documents and statements on food security and agricultural development. It would appear to be a near-consensus that agricultural development must limit its climate impact and that climate change is already affecting agro-ecosystems and that farmers need support adapting to those changes. What is lacking is consensus on the best ways to do that, or on the urgent need for such actions.

Three issues stand out. First, for all the encouraging attention to the links between climate change and agriculture, we see inadequate attention to the underlying causes of the problem: the industrial model of high-input, fossil fuel-based agricultural production. As noted earlier, we see nothing remotely like the kind of paradigm shift called for by IAASTD and others towards more resilient, low-input systems.

Second, the general bias towards private sector incentives rather than direct public sector investment has drawn widespread criticism from developing countries, which argue that such measures evade rich country responsibilities for financing climate mitigation and adaptation, and they will be ineffective in any case. The Green Climate Fund proposal to raise \$100 billion per year from public and private sources is an example (Conference of the Parties 2010).

Third, the reliance on carbon markets to address climate change is controversial, and especially so in agriculture. This is coming to bear on developing country

agricultural development through Reducing Emissions from Deforestation and Forest Degradation (REDD) and REDD+, the UN programmes designed to allow developed countries to get credit for emissions reductions by contributing to efforts to reduce deforestation and improve carbon sequestration. The REDD programme, in particular, has created a controversy due to its debatable impact on mitigation and the violations that have and may continue to occur to the rights of people who currently occupy land in and immediately around the forests that may be coveted by governments seeking REDD payments (Sharma and Suppan 2011).

The new and consistent attention to the links between climate change and agriculture are welcome, but concerted action is needed to avoid having the international response limited to the promotion of carbon markets and private investment in high-input industrial agriculture. Real change, of course, needs to come from the United Nations Framework Convention on Climate Change (UNFCCC) and ongoing climate talks, which are stalled. But some governments are now seeking to bring agriculture more formally into the discussion. A proposal to develop a work programme on agriculture was under consideration at the December 2011 climate negotiations but it did not move forward.

Trade and Food Security

Nearly all of the institutions we have reviewed included in their final communiqués on food security a call for the swift completion of the Doha round at the WTO. This is both unlikely and undesirable. It is unlikely because talks remain deadlocked. In the preparations for the December 2011 ministerial, negotiators could not even agree on the inclusion of two proposals for the ministers' agenda that sought to limit the use of export restrictions (tariffs or bans) on exports destined for use in emergency relief programmes (ICTSD 2011). Several decades of wrong-headed policies have weakened developing countries' domestic food production, including agricultural trade liberalisation, disinvestment in agriculture, and the shrinking of state roles and responsibilities for agriculture and food

under structural adjustment programmes. Least developed countries moved from agricultural surpluses before 1980 to massive importers of food, mostly from developed countries (Clapp 2012).

The recent turbulence in international markets has exposed the fallacies of those policies. Now, the welcome and renewed attention to agricultural development and the role of the state need to be supported by trade policies that recognise the necessity of protecting food-producing sectors as they develop. The countries that best weathered the recent price spikes were those that actively managed trade flows (Oxfam 2011).

Thus far, the international institutions have failed to recognise the key role of trade regulation in developing country food security. We do not need more agricultural trade liberalisation, under Doha or under the plethora of regional trade agreements that have been signed while the WTO negotiations linger on. Better to ask, as the UN's Special Rapporteur on the Right to Food did in a recent report, how can we put food security first in the international trade system? (De Schutter 2011b).

Market Power in the Food System

As agricultural, energy, and financial markets become more integrated on a global scale, the power of transnational firms within the global food system grows. This poses significant threats to global food security, despite the advanced production and communication systems these firms bring. Many have documented these trends and their complex implications (see, for example, Murphy 2006; UNCTAD 2009). Of the institutions we reviewed, only the UN Special Rapporteur has given it the attention it deserves, from seed policies to value chains to the negative consequences of contract farming.

As De Schutter points out, current systems of global governance are poorly equipped to address the concentration of market power as an obstacle to achieving the right to food. In fact, the expanded interest in public-private partnerships and the continued commitment to the expansion of industrial agriculture lead towards greater corporate concentration in developing country agriculture.

Conclusions

The causes of the recent food price crisis, and the fragility of the system the crisis uncovered, are still by and large untouched. The world needs policies that discourage biofuels expansion, regulate financial speculation, limit irresponsible land investments, promote the use of buffer stocks, move away from fossil fuel dependence and towards agro-ecological practices, reform global agricultural trade rules to support rather than undermine food security objectives. These are urgent policy matters yet they continue to be neglected by the powerful economies.

Instead, reform efforts focus too heavily on increasing production. While food production needs to increase, there are many problems with this short-sighted supply-side approach. It encourages the expansion of industrial agriculture rather than more sustainable and affordable methods. It treats current demand trends – biofuels, meat-based diets, post-production food waste, etc – as given rather than challenging the policies that encourage them. Also unchallenged are the inequities in the distribution of the food we produce, which is more than enough to feed everyone. Of the institutions we reviewed, only the UN Special Rapporteur's office has consistently questioned the heavy emphasis on increasing production.

Fortunately, many developing countries are not waiting for international action or permission to more aggressively address the problems that can be dealt with at a national or regional level. Many of the CAADP projects in Africa, for example, emphasise the kinds of changes that are needed. So too do efforts to promote regional integration, which are too often met with resistance by international donors. They remain more interested in globalised markets than local and overly willing to rely on humanitarian aid and social safety nets to address poverty, rather than ready to support political and economic change processes that would eradicate poverty (Mousseau 2011).

The African Union responded to the G-20's Action Plan on Food Price Volatility and Agriculture with a strong message, including a demand for policies to increase food self-sufficiency:

African countries are not looking forward to depending continuously on external supplies

that will remain uncertain in prices and quantities. Actually, our ultimate and unquestionable ambition is to develop our agriculture and markets. ...In our opinion, we must rely on our own production to meet our food needs. In fact, importation is not Africa's goal (NEPAD 2011).

The recent food price crisis has exposed the fragility of the global food system. There has been much progress in international policies and practices on food and agricultural development, but some of the underlying causes of the crisis have yet to be addressed. Developing country governments will be central to bringing about such changes. They need the policy space to pursue their own solutions and they need the support of the international community to demand deeper reform in developed country policies.

REFERENCES

- Abbott, Philip C, Christopher Hurt et al (2011): "What's Driving Food Prices in 2011?", *Issue Report*, Oak Brook, Ill, Farm Foundation.
- CFS (2011): "Process of Consultation on Principles for Responsible Agricultural Investments within the Committee on World Food Security (CFS)", Rome, Italy, Committee on Global Food Security.
- Chowdhury, Anis (2011): "Food Price Hikes: How Much Is Due to Excessive Speculation?", *Economic & Political Weekly*, XLVI: 12-15.
- Clapp, Jennifer (2012): "Food Security and the WTO" in R Wilkinson and J Scott, *Trade, Poverty, and Development: Getting beyond the Doha Deadlock*, Routledge.
- Conference of the Parties (2010): "Addendum to Part Two: Action Taken by the Conference of the Parties at Its Fifteenth Session", *Report of the Conference of the Parties*, Copenhagen, Denmark, UN Framework Convention on Climate Change.
- De Schutter, Olivier (2011a): "The Green Rush: The Global Race for Farmland and the Rights of Land Users", *Harvard International Law Journal*, 52(2).
- (2011b): "The World Trade Organisation and the Post-Global Food Crisis Agenda: Putting Food Security First in the International Food System", Louvain-la-Neuve, Belgium, UN Special Rapporteur on the Right to Food.
- Fan, Shenggen and Mark Rosegrant (2008): "Investing in Agriculture to Overcome the World Food Crisis and Reduce Poverty and Hunger", IFPRI, Washington.
- Fan, Shenggen, Maximo Torero et al (2011): "Urgent Actions Needed to Prevent Recurring Food Crises", *IFPRI Policy Brief*, International Food Policy Research Institute, Washington DC.
- FAO, OECD et al (2011): "Price Volatility in Food and Agricultural Markets: Policy Responses, Food and Agricultural Organisation".
- G-20 Agriculture Ministers (2011): "Ministerial Declaration: Action Plan on Food Price Volatility and Agriculture", Paris, France, G-20.
- Ghosh, Jayati (2009): "The Unnatural Coupling: Food and Global Finance", *Journal of Agrarian Change*, 10(1): 72-86.
- Gilbert, Christopher L and C Wyn Morgan (2010): "Food Price Volatility, Philosophical Transactions of the Royal Society", pp 2023-34.
- HLPE (2011): "Price Volatility and Food Security", Rome, Italy, High Level Panel of Experts on Food Security and Nutrition (HLPE).
- IAASTD (2009a): "International Assessment of Agricultural Knowledge, Science and Technology

for Development: Global Report" (Washington DC: Island Press).

- (2009b): "Major Agricultural Report: Business as Usual Is Not an Option" (Washington DC: IAASTD).
- ICTSD (2011): "WTO Members Drop Food Security Proposals for Ministerial", *Bridges Weekly Trade News Digest*, 15.
- Lagi, Marco, Yavni Bar-Yam et al (2011): "The Food Crises: A Quantitative Model of Food Prices Including Speculators and Ethanol Conversion" (Cambridge, MA: New England Complex Systems Institute).
- Mousseau, Frederic (2010): "The High Food Price Challenge: A Review of Responses to Combat Hunger", The Oakland Institute, Oakland, CA.
- (2011): "Achieving Regional Integration: The Key to Success for the Fight against Hunger in West Africa", Oakland Institute and ACF International Network, Oakland, California.
- Murphy, Sophia (2006): "Concentrated Market Power and Agricultural Trade", *Eco-Fair Trade Dialogue*, Heinrich Böll Stiftung and Misereor.
- NEPAD (2011): "AU/NEPAD Declaration on the G-20 Action Plan on Food Price Volatility and Agriculture", Midrand, South Africa, New Partnership for Africa's Development Planning and Coordinating Agency.
- Oakland Institute (2011a): "Understanding Land Investment Deals in Africa: Mozambique", Oakland Institute, Oakland, California.
- (2011b): "Understanding Land Investment Deals in Africa: Tanzania", Oakland Institute, Oakland, California.
- Oxfam (2011): "Preparing for Thin Cows: Why the G-20 Should Keep Buffer Stocks on the Agenda" (Oxford: Oxfam International).
- Platform (2010): "Evidence Paper on Agriculture and Rural Development for HLF-4 Busan", Global Donor Platform for Rural Development, Bonn, Germany.
- Pretty, Jules Camilla Toulmin et al (2011): "Sustainable Intensification in African Agriculture", *International Journal of Agricultural Sustainability*, 9(1).
- Sharma, Shefali and Steve Suppan (2011): "Evasive Promises of the Kenya Agricultural Carbon Project", Institute for Agriculture and Trade Policy, Minneapolis, Minnesota.
- Sims, Ralph, Michael Taylor et al (2008): "From 1st to 2nd Generation Biofuels: An Overview of Current Industry and RD&D Activities, OECD/International Energy Agency.
- Timmer, C Peter (2011): "Managing Food Price Volatility: Approaches at the Global, National and Household Levels".
- UNCTAD (2009): "World Investment Report: Transnational Corporations, Agricultural Production and Development", *World Investment Report*, Geneva, UNCTAD.
- (2011): "Price Formation in Financialised Commodity Markets: The Role of Information", United Nations Conference on Trade and Development, Geneva.
- von Braun, Joachim and Maximo Torero (2009): "Implementing Physical and Virtual Food Reserves to Protect the Poor and Prevent Market Failure", *IFPRI Policy Brief*, International Food Policy and Research Institute, Washington DC.
- Watkins, Neil (2011): "Land Husbandry, Water Harvesting and Hillside Irrigation Project: A Case Study of New Investment Supported by the Global Agriculture and Food Security Programme (GAFSP)" (Washington DC: Action-Aid, International US).
- Wyeth, John and Steve Ashley (2009): "Agriculture and Food Security: Pre-Evaluation Review of DFID Policy", *Agriculture Sector Policy Review*, Department for International Development, London, UK.
- Zagema, Bertram (2011): "Land and Power: The Growing Scandal Surrounding the New Wave of Investments in Land", *Oxfam Briefing Paper* (Oxford, UK: Oxfam International).