Building global food security

Unrest of 2008 prompts policymakers into action

In the summer of 2008, following a twoyear period which saw 75% increases in international food prices, staples such as rice, corn, cereals and soybeans reached 30-year price highs. This price spike was most prominent in the case of rice (a key food source for approximately 3 billion people), whose value more than tripled in just four months. The international price of the benchmark Thai B Grade white rice increased from about \$360 per tonne in November 2007 to a record \$1,080 per tonne the following April. International market prices for wheat, corn (maize), soybeans and other foods also hit record highs in the ensuing months. As prices reached their peak, there were riots and protests in more than 30 countries, which contributed to the overthrow of the governments of Haiti, Mauritania and Madagascar.

Farmers across the developed world responded to price signals by harvesting a record wheat crop in the 2008-9 season, while many countries produced near-record rice and corn harvests. But even though the easing of supply-anddemand pressures has led prices to drop significantly, they are unlikely to return to pre-crisis levels. Food prices in November 2009 were still 30% higher than they were in November 2006, and 92% higher than they were in January 2000. Those hardest hit by this net price increase, as well as by the global economic downturn, are the world's poorest. The United Nations Food and Agriculture Organisation (FAO) estimates that the number of undernourished people is now over 1bn, about 100 million more than before the food crisis. While the intense political pressure brought about by protests and civil action has largely ceased, the global food crisis is by no means over.

The issue of food security is defined by the UN as 'when people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life'. It is not a question of food independence among individual nations (hardly any can claim to be entirely self sufficient). Rather, when food security is lacking, and famine threatens, it is a failure of local markets, economic development, international markets, national politicians and the international community.

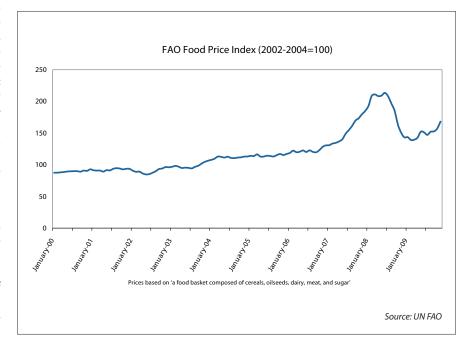
Climbing up the international agenda

The percentage of Official Development Assistance (ODA) funds channelled towards the agricultural sector dropped from 17% in 1979 at the peak of the so-called 'green revolution' (whereby new research and technologies transformed farming practices, allowing agricultural production to keep pace with a swelling world population), to a low of 3.5% in 2004. By 2007 this figure had crept back up to 5.5%. Since the unrest of 2008, governments and international organisations have acknowledged that current levels of investment in agriculture and food security are insufficient to meet both the short term-challenge of preventing dangerous spikes and the long-term challenges presented by climate change and population growth. The fact that policymakers are now placing greater priority on such issues has given optimists reason to hope that a second green revolution could be afoot.

A number of summits over the course of 2009 have demonstrated a coordinated political will on the part of both the developed and developing world to tackle the problem of food security. In January, a ministerial summit convened in Madrid by the UN and the Spanish government created a new Global Partnership for Agriculture and Food Security as a means of galvanising political momentum across governments, the private sector and donors. In July, the G8 meeting in L'Aquila, Italy produced a promise to 'mobilise' \$20bn over three years in a 'coordinated, comprehensive strategy focused on sustainable agriculture development'. This was complemented two months later at the G20 meeting in Pittsburgh by increased promises for agricultural investment worth \$22bn and a new plan for a trust fund for food security within the World Bank. The World Summit on Food Security, which took place on 16-18 November 2009 at the FAO's headquarters in Rome, was attended by delegates from 180 countries, including 60 heads of state. Though this summit did not result in any new funding pledges, it produced a statement that underscored the necessity of national action on food security, to be nurtured by the international community and multilateral organisations.

Global investment challenges

Ensuring food security over the long term willrequireaconcertedinternationaleffort that cuts across government agencies, donors, farmers and corporations. By 2050, the world's population is expected to peak at approximately 9.1bn, 3bn more than today, and, according to UN estimates, will demand a 70% increase in food production over the next 40 years. And though individual scientific models provide conflicting predictions



of how precipitation and agricultural productivity will be affected by global warming, there is general agreement that the land areas available to arable farming will be subject to change, requiring farmers to adapt their methods accordingly.

It was only by increasing energy consumption agricultural that productivity was transformed during the green revolution: agriculture, livestock and deforestation now account for approximately one-third of global greenhouse-gas emissions. But as energy prices increase, and governments seek to mitigate the impact of climate change by reducing their economies' carbon footprint, modern agriculture must find a means of breaking the link between high energy consumption and greater productivity. A step forward of this kind mean would that food prices would be less likely to increase dramatically as a result of energy shocks.

These challenges will require long-term investment in greater agricultural productivity, to include: improved irrigation systems, increased deployment of effective and sustainable fertilisers, new varieties of seeds (including genetically modified ones), improvements to rural roads and developing human capital. As has been demonstrated by periods of rural growth in China and India in the 1970s and 1980s, as well in Vietnam and Latin America more recently, the benefits of sustained growth in food production are often felt across the wider economy and can be a precursor to industrial and economic growth. With rapid agricultural growth come steep declines in rural poverty.

Regional partnerships in Africa, like the Alliance for a Green Revolution in Africa and the New Partnership for Africa's Development (NEPAD) have been galvanised by the international community's focus on food security. These partnerships are pushing African countries – with successes like Malawi, Rwanda and Ghana held up as examples – to fulfil a commitment that all African nations made in 2003 to NEPAD to invest 10% of their national budgets in agriculture. While the green revolution saved much of Asia from starvation, it never took hold in sub-Saharan Africa, where food insecurity is greatest today.

Governance issues

However, food insecurity stems from complex and overlapping issues of political, economic and environmental policies and cannot be solved simply by focusing on investment. The spark that initiated the recent food crisis was not under-investment in agriculture. The crisis was instead initiated by an overlapping set of actions and events, including energy price rises, weather-related crop failures and counterproductive government policies. Ensuring that food price spikes like those of 2008 don't happen in the future will be more than a matter of simply producing more food.

It will require a strong and robust global trading system. The international price inflation of 2008 for exported rice was not driven by a global shortage of rice, only by a shortage of rice available on international markets. Major exporter governments, such as Vietnam and India, prohibited exports in an effort to insulate their domestic markets from international price increases, while importer governments, such as the Philippines, Bangladesh, Nigeria and Iran, sought to make large international purchases in order to quell domestic political unrest caused by short supplies and rising food prices. A legacy of this market failure is that countries are preparing for the next crisis without considering free international markets as part of their plans - some, believing free markets will no longer exist

if prices spike again, are concluding bilateral supply agreements. Others, including China, Saudi Arabia, South Korea and the United Arab Emirates are using state-affiliated companies to buy or lease arable land in order to guarantee agricultural exports to their home countries. Thus far, these 'land grabs' have focused on buying land in poorer nations, like Sudan, Tanzania, Madagascar and Uzbekistan. These deals raise difficult and unresolved questions of state sovereignty. On the other hand, they provide much-needed agricultural investmentinunder-developed countries. It remains to be seen, however, how hostnation governments will react in a food crisis: would a poor country continue to allow grain exports if its population were starving? Free and open trade in staple foods is a necessary component of a secure global food system: government actions could help to undermine that system.

As these examples show, responsibility for food security cannot easily be placed at the door of any single government or international body. National policy decisions are too often disjointed, made without input from others. For example, in many countries, the watermanagement agency is separate from the environmental-management agency, which is separate from the agriculture and commerce ministries. Meanwhile, international development and donor agencies act in a disjointed manner too.

The substantial investments and policy pledges towards agricultural development that have been initiated in 2009 could pave the way for long-term global food security. But it remains to be seen whether the current easing of food prices is more than a mere pause in a wider pattern of price fluctuations and if policymakers can avoid the poor choices that led to the 2008 crisis and build upon the current political will to end global food insecurity.

