When food markets do not provide enough food

Lessons from the recent food price crisis
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The world is facing a food crisis

Voices of the people
Jane Ndumi Kamwanga has 7 children, earns her living as a bar worker, and lives in Mukuru Kayaba, Nairobi’s notorious slum area. Since mid-2007 she has been facing a very severe situation: food prices have risen to a level where the costs of feeding herself and her children exceed her monthly income of 2000 Shilling (25 USD). “I now rely on my two married daughters to complement the family income and provide food for all of us,” says Jane. “The food we consume has not changed – we eat ugali (a mash made from maize flour), cabbage, and githeri (a mixture of maize and beans) – but of each we eat less, and we eat less often, mostly only one time per day.” High food prices also mean that the Kamwangas have no money left for health care and education, thus diminishing their future options to earn income and gain access to healthy diets.

Rael Waeni, a 69-year-old farmer from Kyumbi division in Machakos district, a rural area 64 km away from Nairobi, is similarly affected by high food prices. Today, Rael mainly lives on off-farm income: he crushes stones with a small hammer and sells the gravel to people who use it for the construction of houses. Normally he would have been able to sell a little surplus from his farm on local markets, but his farm no longer produces much these days. A severe drought has affected the region and crop yields have further decreased. Asked about the continuous rise in food prices over the last 1.5 years, Rael explains: “All the little money that comes our way is spent on food and this is not even enough to feed ourselves.” He continues: “This week the government gave us two kilograms of maize per household as relief food, but without beans. We have already finished it and we don’t know when we shall receive more rations.”

When food prices go up and poor people can no longer access food
Problems like the ones faced by the Kamwangas and the Waenis are commonplace in many developing countries, and they show that something has been going wrong in the world food system. Indeed, soaring food prices in 2008 – frequently referred to as the recent food price crisis – and increasing fluctuations in food prices have raised concerns about the availability of food at the global level and particularly in specific food-deficient developing countries.

The world food system – consisting of the actors dealing with food production, transformation and trade, as well as the national and international rules and policies that set the framework for their actions – seems to be functioning in a way that does not provide food for all: many households and entire countries have become food-insecure.
Food security, however, does not mean that every household or country must produce the amount of food it requires, as long as there is food produced elsewhere and the given household or country can purchase it. However, in many developing countries these conditions are not given, and with the recent shortage of food supplies people and organisations are increasingly calling for more food sovereignty while countries try to increase their self-sufficiency in food production.

The global food price crisis made headlines in 2008, and the world community reacted with innumerable policy studies, scientific publications and Internet blogs discussing the causes and effects of high food prices. Now, in early 2009, food prices have come down to pre-2008 levels, and global food security and related issues of agricultural development, trade, poverty, and hunger risk being shelved as the world economic crisis and other events absorb the world’s attention.

Despite falling world market prices for food, domestic food prices in many developing countries remain high and many poor people, particularly in food-deficit developing countries, remain unable to buy the necessary food for their daily diets. While the global food price crisis (meaning high prices) is levelling out, the global food crisis (meaning not enough food available for poor people) continues and is even aggravated by the world’s economic slow-down. However, based on the lessons learnt about the causes and effects of the recent food price crisis, it is now possible to formulate policy and programme measures that tackle the root causes of structural food insecurity worldwide and particularly in developing countries.

The recent developments: Price rises and increasing demand
Summer 2008: Prices for cereals and other foods had been increasing since 2001, and by mid-2007 they had begun an unprecedented rise. The boom reached its peak in May–June 2008; by then, the rise in prices had affected almost all food commodities. Prices of wheat and poultry had doubled since 2003, prices of maize and butter had tripled, and the price of rice had more than quadrupled.

January 2009: World food prices have come down by 50% since July 2008, mainly due to good estimations for 2008 grain harvests and an improved outlook on food supplies in 2009. Indeed, world food production grew in 2008. Compared to the previous year, wheat production in 2008 increased by 11%, production of coarse grains (maize, sorghum and barley) by 2.6%, and production of rice by 2.1%; these production levels were all well above the average of the previous five years.
World grain stocks recovered as well in 2008, after having reached their lowest levels since the early 1980s in 2006. End-of-season stocks rose by 8%, mainly due to increases in wheat and rice stocks, while maize stocks continue to decrease. Decreasing demand as a consequence of the looming recession in the world economy, and falling energy prices, particularly for crude oil, have also contributed to ending the boom in food prices.

The world seems relieved that the food price crisis has not led to more severe food shortages and further social uprisings among the poor. While in summer 2008, in view of the surging food prices, governments and aid agencies organised various crisis and emergency meetings, politicians now tend to give the all-clear or – overwhelmingly occupied with other world problems – return to the all-silent vis-à-vis the world hunger situation. However, the latest levelling of food prices indicates that beyond seasonal alterations there are also structural imbalances between supply and demand in the world food system which jeopardise the food security of a large part of the world’s population and make the lack of food security a permanent phenomenon.

Four aspects provide evidence for this statement:

- **Increasing cereal consumption**: In fact, cereal consumption has risen by almost 18% in only 10 years. By comparison, the population has increased by less than 13% in the same period. Theoretically, there is enough food for everybody. However, given the demand for energy and the changing consumer preferences, new market players such as the bioenergy industry and the value added (meat) production industry buy most of the additional staple foods available.

- **Disparity of production**: The main contributions to increased food production come from countries in the northern hemisphere, particularly the European Union and the United States of America, as well as some Asian countries. Cereal production in low-income, food-deficit countries has increased by only 1.7% (compared to 4.9% worldwide), and their end-of-season stocks, excluding China and India, are even 2.1% lower than one year ago. Once again, developing countries risk becoming more dependent on food production in the North.

- **Lack of purchasing power**: Many people in developing countries lack the purchasing power to buy food on the market at the given prices. An increase in food prices and the general economic downturn will inevitably cause a rise in the number of food-insecure people.

- **Dependence on food aid**: Many developing countries continue to experience food shortages and depend on foreign food aid. Recent examples are Mozambique and Haiti, both of which are facing food shortages due to adverse weather conditions and poor harvests.


**World cereal production and utilisation (in million tonnes) (FAO)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Production</th>
<th>Utilisation</th>
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<tbody>
<tr>
<td>2003</td>
<td>1700</td>
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<td>2004</td>
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<td>2007</td>
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<tr>
<td>2008</td>
<td>2300</td>
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</tbody>
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Consequences of high food prices

Increasing food insecurity
On the World Food Day in October 2008 the FAO indicated that the food price crisis had added another 44 million people within only one year to the number of people not having enough to eat on a regular basis, increasing this number to almost one billion people worldwide. In Africa 33% of the population goes hungry, in Asia 16%. In view of this development, progress towards any hunger reduction targets, such as the Millennium Development Goals, is becoming increasingly questionable.

Poor households in developing countries become more vulnerable
Higher food prices had devastating impacts on the livelihoods of poor households, where food accounts for about 60% of total expenditures in Asia and above 80% in Africa. Food price rises have seriously eroded households’ purchasing power, increased the severity of food deprivation and malnutrition, and diminished work capacity. High prices also affect the health of the poor; diets become less balanced and due to high expenditures on food, less money is available for medical treatment. Vulnerable people such as women or marginalised groups are likely to be severely affected, being the most food-insecure.

In many countries people affected by high food prices, particularly the urban poor, have taken to the streets. Riots over the soaring costs of basic foods occurred during 2007 and 2008 in some 36 countries, from Bangladesh to Egypt to Cameroon, Haiti and Mexico, putting political stability at risk. Meanwhile, income inequality is on the rise as the less wealthy have to pay a greater share of their income for food.

In this context the crucial question is whether those who have fallen into poverty and hunger due to the recent food price crisis will be able to get out of this situation in the short run. It is likely that the trend is irreversible for most of them, as they have lost assets and jobs.

Smallholder farmers have yet to benefit from the opportunity
Farmers in both developed and developing countries are facing changed production conditions: higher costs for farm inputs, on the one hand, and higher selling prices for their products, on the other. With higher food prices, a long-awaited opportunity for more production seems to have materialised: producers in developing countries can improve their incomes by selling surplus production while supplying domestic markets with locally produced food. However, farmers in developing countries risk not being able to take advantage of these new price incentives quickly enough as they are often not well connected to markets and lack the financial and technical capacity to expand their production rapidly. And finally, most small-scale farmers in developing countries are negatively affected by higher food prices because they buy more food than they sell.
Moreover, producers in many developing countries have had to carry the burden of higher input prices while domestic food prices remained low due to export taxes and trade restrictions. Additional efforts need to be made to empower farmers in less developed countries to revive their production – otherwise a historic opportunity to bring world food markets into balance will be missed and large producers in more developed food-exporting countries will fill the gap.

Economic stability in developing countries in jeopardy
Higher food prices have also contributed to accelerating inflation, thus challenging macro-economic stability. Food-importing countries ranging from Japan to Haiti and the Sahel countries face higher import bills that worsen balance of payments positions already under pressure from high energy prices. This is a particular challenge to countries with inadequate foreign exchange reserves. Meanwhile, cutting spending and raising interest rates to curb inflation risks to slow the economic growth that poor countries so badly need.

Food aid decreases
In 2007/2008 food aid reached its lowest level in 40 years. However, food aid is likely to increase again as many low-income net food-importing countries will run short of food supplies. Due to higher prices, the costs of safety nets and food aid programmes may reach levels too high for food aid funds. The functioning of the entire global food aid system is at risk.

Land sales and increasing farmland scarcity
2008 saw the emergence of a new, politically rather risky phenomenon. Rich countries with insufficient food production as well as international corporations have started to purchase and lease farmland for food and biofuel production in developing countries and bread-basket nations. Rich countries that see demand for food at home exceeding their ability to produce, want to reduce their dependence on cash reserves to buy food on world markets which have not been able to supply adequate quantities at affordable prices in the past year. Instead, they aim to control grain production abroad and reduce transaction costs arising from trading. Meanwhile, private corporations are beginning to invest in food and biofuel production, which they increasingly regard as a sound investment since the world will be able to rely less and less on fossil fuels.

Such investments, however, reduce the amount of land that is available for the production of food in developing countries. Particularly the large number of subsistence farmers who depend on land to feed their families will be affected by land scarcity and rising land prices. Foreign investment in developing country agriculture may be a welcome opportunity if measures are taken to ensure positive effects on local income generation and food supply. Without such measures, however, developing countries simply risk to sell out their resources to the North.
Prior to 2007 no institution was able to adequately predict the upcoming crisis and give appropriate warnings. Now there is empirical evidence to suggest that long-term structural and short-term cyclical factors contributed to the 2007/2008 price rise. Secondary effects in reaction to the measures taken by policy-makers and market agents accelerated the price spiral. Supply and demand play an important role, as well as the structural imbalances between production and demand.

The main driving factors of the food crisis have been structural:

- The diversion of food crop acreage to the production of first-generation biofuels in reaction to high energy prices and food-for-fuel programmes. The production of fuel ethanol tripled between 2000 and 2007, mainly due to production in the USA (from maize) and in Brazil (from sugarcane); biodiesel, most of it from the USA and the EU, expanded from 1 billion litres to 11 billion litres.

- The surge in oil prices affecting all levels of the food production and marketing chain, increasing all costs for fertilising, harvesting, transport and processing.

- The growing demand for grain due to changing consumer preferences. In countries where purchasing power among middle-class consumers is on the rise (e.g. China and India), the demand for meat and other grain-intensive high-value agricultural products (e.g. hamburgers) grows. Side effects of this development include concentration processes in the food processing and retailing industry of these products, as well as additional price increases due to reduced competition.

- Investment in agriculture in developing countries has been neglected over the years due to low prices, leading to restricted technology and infrastructure development, restricted research and extension programmes, and restricted farmer support. Meanwhile, US and European farmers have profited from domestic and export subsidies.

- Declining production in some regions where water is becoming scarce and agricultural land is lost to other land use systems (e.g. through urbanisation, industrialisation or conservation).
The crisis was intensified by cyclical factors such as the weakening of the US dollar, declining food stocks, and adverse weather conditions during 2006 and 2007 in key producing regions such as Australia, Russia and Ukraine.

Governments enforcing export bans, trade limitations and market regulations helped to drive prices up further. This happened particularly in developing countries, which produce surpluses in basic food grains but have high numbers of malnourished people unable to afford food. An FAO survey showed that almost 40 countries reduced their import tariffs for grains and more than 20 countries imposed export controls of some kind – whether taxes or quantitative controls such as outright bans and quotas. For example, major rice-exporting countries such as Thailand, India, Vietnam and Indonesia put export bans and trade restrictions on rice. Other countries followed, limiting grain exports to force domestic food prices below world market levels but at the same time exacerbating the situation by increasing price volatility in the international grain markets.

Prices have also been artificially driven up by speculation. A study by the Institute of Agriculture and Trade Policy (IATP) found that futures contracts for agricultural commodities, which traditionally are important measures for producers and traders to manage price risks, have become speculative positions in commodity index funds, where they are combined with futures contracts for other commodities such as oil and metals. In consequence, price movements in non-agricultural commodities can trigger the purchase or sale of a contract regardless of the underlying supply and demand in agricultural commodities.

Studies confirmed that unfavourable weather conditions, increasing energy prices and the growing demand for biofuels have also contributed greatly to the surge in food prices.

Mixed opinions exist with regard to the importance of changing consumer behaviour; most studies classify this as secondary by comparison with demands for biofuel production and energy prices.

There are also some studies that attribute higher food prices to the combination of population increase and decreasing productivity due to natural resource degradation or land scarcity. However, most authors reject these arguments. Statistics confirm that food production is steadily on the rise and above population growth rates. The FAO is even arguing that with record grain harvests in 2007, there is more than enough food in the world to feed everyone – at least 1.5 times the current demand.

Recently, discussions have sprung up regarding the extent to which climate change affects crop productivity. However, the full effects of this phenomenon are yet to come and are not among the root causes of the recent food price crisis.
Lessons to learn and actions to take

Despite recently falling prices, the era of cheap food seems to be over, and the question remains whether the world food system, with its main players in production, processing and sales, as well as the rules for agricultural trade and global food aid, are still adequate. A major lesson here is that, despite the closer integration of world food and energy markets, where energy price fluctuations will also cause food price fluctuations, the global food system continues to be operational. It reacted swiftly to the recent food price surge; production is now up and prices have come down. With regard to the increasing number of hungry people, however, this may not be good enough to ensure food supplies for all in the future.

The magnitude of the recent food price crisis has highlighted the sensitivity of the world food system to the emergence of new demands that come with high purchasing power – such as the demand for biofuels and the demand of value-added agro-industries. Fundamental structural imbalances on world food markets prevent supply from matching demand and provision of food to everyone. High prices for major food crops could undercut the progress in poverty reduction achieved in recent years, while the world economic crisis may even increase the negative effects on poor people’s incomes, slowing down economic activity, including the production of food, and forcing countries to allocate fewer financial resources for fighting hunger. The food price crisis has raised major concerns about food security issues, and for a moment it seemed that governments and aid organisations would address the striking structural imbalances on the world food markets. However, now that the food price bubble has burst and some threats of food insecurity have faded away, the world seems to be back to normal, without having addressed the prevailing structural causes of global hunger and malnutrition in an adequate manner. However, lessons can be learnt from the recent food price crisis that will fuel further debate and negotiations on rules, agreements and policy measures susceptible to reducing the negative impacts of structural imbalances in the world food system.

In June 2008 the FAO organised a World Food Summit. Among other things, the conference demanded more agricultural investment and immediate food aid.


IMF and the World Bank set up an aid package with different support measures for small-scale farmers, including special loans. The WB set up the Global Food Crisis Response Program.


Donors are increasing investment in agricultural research, providing an additional USD 800 million for the centres in the Consultative Group of International Agricultural Research (CGIAR).

One initiative resulting from the food price crisis is the UN High-Level Task Force on the Global Food Security Crisis which aims to coordinate efforts among international aid agencies. The Task Force has defined a common Framework of Action for which its members are expected to spend USD 10 billion.

www.un.org/issues/food/taskforce
Measures and policies to mitigate the food crisis

The most important measures with immediate effects on current imbalances in the world food markets are:

- Abandoning first-generation biofuel support programmes and related subsidies. Energy production must be organised in a way that does not compete with food production for soil and water. Policies for biofuel blending, particularly to spur mixing bioethanol and biodiesel in car fuel, need to be abolished or revised.

- Improving access to social protection and safety-net programmes – such as cash transfers, food-for-work, child nutrition and school feeding – for poor and hungry people affected by high food prices, to help meet their minimum food consumption needs.

- Reducing market volatility in the developing countries by replenishing grain stocks, better regulating the grain markets, and eventually setting up an international mechanism that could be used to sell food (physically and virtually) in situations of surging prices.

- Provision of support to facilitate extended production in developing countries, e.g. improved access to farm inputs, knowledge, credits, and markets, reflecting also the requirements of small-scale and subsistence farmers. Meanwhile, developing-country governments need to adopt policies to assure that foreign investment in agricultural production generates benefits for the local population and will not have adverse effects on food production and resource exploitation.

Policies must be developed to tackle the structural imbalances in the world food system and to help food-deficient developing countries become self-sufficient in food production. Dispersed food production decreases price volatility and provides more food and income to people in the South. However, as few countries have the conditions required to achieve complete food self-sufficiency and food sovereignty, each country must define its own food security objectives. A wide range of measures at the international and national levels can help to meet such objectives:

- Reducing trade in subsidised agricultural products and fostering trade in food commodities under conditions that are fair for Southern countries. Export bans and price control mechanisms put in place by food exporting countries have rather accelerated the price spiral on world markets and can be regarded as counterproductive for the most part.

- Increasing smallholder farmers’ access to critical agricultural inputs, knowledge and technology, e.g. via improved and better-functioning agricultural research and extension services.

- Improving rural infrastructure and services (roads, electrification, irrigation, market access).

- Promoting sustainable agricultural production to fight the negative effects of climate change and resource degradation.

At the FAO World Food Summit no agreement was reached on the most contentious issue: biofuels. A suggestion by the FAO party to introduce international standards in order to ensure that biofuels are not produced at the expense of the world’s hungry, has been ignored.

The Ethiopia Commodity Exchange (ECX) was launched in early 2008, with trade in six commodities: coffee, sesame, haricot beans, teff, wheat and maize. It provides a marketplace where buyers and sellers can trade and be assured of quality, delivery and payment. For more information, see www.ecx.com.et

Implementing Physical and Virtual Food Reserves to Protect the Poor and Prevent Market Failure

www.ifpri.org/pubs/bp/bp010.pdf

The International Assessment of Agricultural Science and Technology (IAASTD) released its concluding report calling for renewed support to small-scale farmers to address soaring food prices, hunger, social inequities and environmental disasters. It recognises that market forces alone cannot deliver food security and underlines the importance of agricultural knowledge, science and technology.

International Assessment of Agricultural Knowledge, Science and Technology for Development

www.agassessment.org
Demand for energy, the subsidy policies of countries in the North, and under-investment in developing-country agriculture are among the structural root causes of the food crisis that the world has been facing for decades now. The first two factors are likely to remain in place according to the latest signals with regard to maintaining agricultural protection and subsidies for agricultural and biofuel production, particularly in Europe and the United States. Economic slow-down is likely to take a further toll on food security, particularly in food-deficit developing countries. Despite the fact that the unfolding economic crisis is slowing demand for animal feed and energy, the period of low food commodity prices (in real terms) seems to be over. This affects developing countries in two ways: a) their populations have to spend more on food—a daunting perspective particularly for the poor—and b) farmers will have the opportunity to sell their products on local and international markets at higher prices while also facing higher production costs. If developing countries will not react adequately and support local production, they risk to become even more dependent on food production in the Northern and developed countries, and the fundamental imbalances on the food markets may persist.

Furthermore, there are severe challenges to worldwide food security lying ahead in the medium to long term:

- Expansion of the area for agricultural production is most likely to cause further environmental damage and depletion of land and water resources unless measures for sustainable management of natural resources are applied.
- The efficiency of the global and the national agricultural innovation systems will determine whether enough yield-enhancing resources are generated and diffused.
- Global agriculture will need to cope with the effects of climate change. Yield declines ranging from 20 to 40% might occur in many regions of Africa, Asia and Latin America. Weather conditions are becoming less predictable, and droughts and floods might occur more frequently.
- The shortage in fossil fuels will continue, spurring intensified use of land and crops for the production of first-generation biofuels instead of food.
**Recommended reading**

The following list features a documented and targeted selection of print documents and Internet sites of relevance to “When food markets fail to provide enough food: Lessons from the recent food price crisis”. For easier reading they have been allocated to four rubrics: **Overview, Policy, Instruments, Case studies.** The documents are listed by title in alphabetical order. Most of them are available online (accessed on 3 March 2009).

**Policy**

Donald Mitchell. 2008

*A Note on Rising Food Prices*


This paper examines the causes behind the rapid increase in internationally traded food prices since 2002 and estimates the contribution of various factors. It concludes that the most important factor was the large increase in biofuel production in the US and the EU.

**Overview**

Food and Agricultural Organization (FAO) of the United Nations. 2008

*Briefing Paper: Hunger on the Rise.*


In this article, the FAO estimates that the food crisis has driven an additional 75 million people into hunger in 2007. This brings the number of undernourished people worldwide to 923 million in 2007. The continued and drastic rise in the prices of staple cereals and oil crops well into 2008 caused a further increase in the number of chronically hungry people.

**Policy**

Institute for Agriculture and Trade Policy (IATP). 2008

*Commodities Market Speculation: the Risk to Food Security and Agriculture*

*IATP’s Trade and Global Governance program.* *15 p.* [www.iatp.org/iatp/publications.cfm?accountID=451&refID=104414]

In its report, the Institute for Agriculture and Trade Policy concludes that the deregulatory steps taken by the US government opened the door for large financial services speculators to make huge “bets” that destabilised the structures of agriculture commodity markets.

**Policy**

Food and Agricultural Organization (FAO) of the United Nations. 2008


In June 2008 the FAO organised a High-Level Conference on World Food Security where heads of state and government, ministers, and representatives of 181 countries and the European Community met to search for ways of achieving world food security and to address the challenges of higher food prices, climate change and bioenergy.

**Policy**

World Food Programme. 2008

*2007 Food Aid Flows*

*The International Food Aid Information System of the World Food Programme (INTERFAIS), 54 p.* [www.wfp.org/interfais/index2.htm#](http://www.wfp.org/interfais/index2.htm#)

Food aid deliveries have decreased almost continuously since 1999. In 2007 they reached the lowest level since 1961. The WFP suggests to increase the resources available for food assistance to be able to take immediate action and address the serious negative effects of high food prices with regard to hunger and malnutrition across the world.

**Policy**

Joachim von Braun. 2008

*Food and Financial Crisis: Implications for Agriculture and the Poor*


High food prices in 2007 and up to mid-2008 had serious implications for food and nutrition security, macro-economic stability, and political security. The unfolding global financial crisis and economic slow-down have now pushed food prices to lower levels. The food and financial crises have strong and long-lasting effects on emerging economies and poor people. IFPRI advises that a synchronised response is needed to ease the burden on the poor and allow agriculture to face new challenges and respond to new opportunities.
**I International Food Policy Research Institute (IFPRI). 2008**

**Food Crisis and Health Go Hand in Hand**

Press release: IFPRI urges greater cooperation between health and agriculture sectors

IFPRI states that for the world’s poor people, agriculture and health are inextricably linked. Lack of cooperation between the two sectors hinders the fight against poverty and hunger in developing countries, and rising food prices underline the urgency to act. High-level policymakers, researchers, and development practitioners from around the world gathered in November 2008 to explore linkages in research and innovation for better health at the national, regional and global levels.

**Lorenzo Cotula, Nat Dyer and Sonja Vermeulen. 2008**

**Fuelling Exclusion? The Biofuels Boom and Poor People’s Access to Land**


This study focuses on the biofuels policy debate in Africa, Asia and Latin America. The authors explore and analyse current and future impacts of the increasing spread of biofuels in producer countries and on poor rural people.

**William R. Cline. 2007**

**Global Warming and Agriculture**


This study shows that while productivity may increase in a minority of mostly northern countries, the impact of climate change on agriculture will negatively affect overall global productivity, which will decline by 5–20% by the second half of this century as a result of global warming.

**David. S. Battisti and Rosamond L. Naylor. 2009**

**Historical Warnings of Future Food Insecurity with Unprecedented Seasonal Heat**

Science Vol. 323. n. 5911, pp. 240 – 244, [www.sciencemag.org/cgi/content/full/323/5911/240](http://www.sciencemag.org/cgi/content/full/323/5911/240)

Higher growing-season temperatures can have dramatic impacts on agricultural productivity, farm incomes, and food security. Observational data and output from global climate models were used by the authors to demonstrate the high probability that growing-season temperatures in the tropics and subtropics by the end of the century will exceed the most extreme seasonal temperatures on record, while in temperate regions, the hottest seasons on record will represent the future norm. The article explains how extreme seasonal heat damages food systems.

**Institute for Food and Development Policy. 2008**

**Hunger, Crisis and Business: The Perfect Storm for Food Aid**


In its newsletter the Institute for Food and Development Policy argues that the World Food Summit held by the FAO in June 2008 was a failure for the poor and hungry in the world. It states that the food-aid mechanism introduced by the USA and the EU undermines the market system, which would otherwise allow producers in the South to produce and sell food.

**Maros Ivanic and Will Martin. 2008**

**Implications of Higher Global Food Prices for Poverty in Low-Income Countries**


This paper explores the linkages between higher global food prices and poverty by applying models that allow calculation of welfare changes of households covered in ten detailed surveys, as well as national welfare and poverty effects in the countries of study. The findings suggest that the overall impact of higher food prices on poverty is adverse, the urban poor being the most severely affected population segment.
Joachim von Braun and Maximo Torero. 2009
Implementing Physical and Virtual Food Reserves to Protect the Poor and Prevent Market Failure
IFPRI proposes establishing global arrangements to build physical and virtual food reserves in order to protect the poor and prevent market failure.

IAASTD. 2008
International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD)
The assessment, involving governments, civil society and scholars, aims to generate an objective view of the long-term challenges facing world agriculture in order to reduce poverty and hunger around the world and find ways of addressing these challenges based on development and appropriate use of agricultural knowledge and technologies, learning from past experiences and present knowledge.

Organisation for Economic Co-operation and Development (OECD) and the Food and Agriculture Organization (FAO) of the United Nations. 2008
OECD-FAO Agricultural Outlook 2008–2017
This annual report published jointly by the OECD and the FAO provides information about trends in food markets and policies. This particular issue offers a sound analysis of the root causes of soaring food prices in the period of 2007–2008 and a prognosis of how supply and demand for food products will develop till 2017. For the first time, the report includes projections for global biofuel markets and discusses the interactions between biofuel and food markets.

Steve Wiggins and Stephanie Levy. 2008
Rising Food Prices: A Global Crisis
Overseas Development Institute, ODI Briefing Paper 37, 4 p.
This paper examines the causes of rising food prices, as well as expected trends, the likely impact, and possible policy responses for three groups: i) the poor; ii) governments of low-income countries facing higher import bills; iii) aid agencies juggling increased demands for food, cash and technical advice.

GRAIN. 2008
SEIZED! The 2008 Land Grab for Food and Financial Security
In this briefing paper developments on the global land markets are analysed to explain two phenomena: first, the fact that governments of food-deficient countries invest in farmland abroad for their own offshore food production; and second, food corporations and private investors investing in foreign farmland to make profit.

International Fund for Agricultural Development (IFAD) of the United Nations. 2008
Soaring Food Prices and the Rural Poor: Feedback from the Field
Rising food prices. www.ifad.org/operations/food/food.htm
This report is based on the responses received by developing countries with regard to how they have been affected by rising food prices. The aim of this paper is to understand what soaring food prices at the global level mean for poor rural people. It is also intended to serve as a basis for strengthening IFAD’s capacity to identify actions to be taken in collaboration with its member governments, at both the national and the local levels.
This publication states that climate change will increasingly take effect by 2050 and result in increased floods and drought on irrigated croplands. The combined effects of climate change, land degradation, cropland losses, water scarcity and species infestations may cause projected yields to fall 5–25% short of demand by 2050. This would call for new ways to increase food supply.

Oxfam. 2008

The Time is Now: How World Leaders Should Respond to the Food Price Crisis

Oxfam Briefing Notes, Oxfam, UK, 16 p.
www.oxfam.org.uk/resources/policy/conflict_disasters/downloads/bn_time_is_now.pdf?m=234

This paper analyses some of the causes of the food price crisis and suggests a series of steps to deal with it and put in place the reforms required to prevent future recurrence.

Joachim von Braun. 2008

The World Food Situation: New Driving Forces and Required Actions


One of the first reports that systematically analyses trends and emerging challenges of the recent food price crisis and discusses current and desirable responses at the local, national, regional, and international levels. It also informs on issues to be put on the research agendas with regard to agriculture, nutrition, and health.

Colin Andrews and Margarita Flores. 2008

Vulnerability to Hunger: Improving Food Crisis Responses in Fragile States


Recognising the persistence and protracted nature of food crises, Andrews and Flores explore how prevention and response mechanisms could be improved to help decision-makers better address the underlying causes of vulnerability and hunger. The paper draws on case study information to examine real-life opportunities.

Food and Agricultural Organization (FAO) of the United Nations. 2008

World Food Situation


News and reports about the world food situation. Food price index and the food commodity prices.