

PREPARING FOR THIN COWS

WHY THE G20 SHOULD KEEP BUFFER STOCKS ON THE AGENDA

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Katelin Nwaka in Manchali cereal bank in the region of Dodoma, Tanzania.
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The issue of food price volatility is back on the political agenda of the G20 and the Committee on World Food Security. The time has come to reassess the potential of food reserves in the context of more integrated but also more volatile agricultural markets. On the basis of good practices, it is recommended to experiment with innovative and complementary instruments that can improve the efficacy of food reserves, while at the same time addressing market failures and providing benefits and incentives to small-scale farmers.

"Since I joined, I could access enough food to eat, without moving to another village. I could repay my loan and could later store my maize surplus when the harvest was good."

Katelin Nwaka joined a cereal bank in 2006, when she lost her harvest and applied for a bag of maize on credit. Dodoma, Tanzania, 2009

Despite their will to demonstrate a strong political engagement, world leaders have struggled to define co-ordinated responses to cope with the effects of the food price crisis. 'Have we already forgotten the "riots" in Haiti or Africa when prices of certain food products suddenly exploded?' asked the French President, Nicolas Sarkozy, in a recent speech, before recognising that 'Between 2008 and 2010, nothing has been done',¹ although the issue had been raised as a priority at meetings of the G8, G20 and the Food and Agriculture Organization of the United Nations (FAO)'s Committee on Food Security (CFS).

The underlying causes of the crisis and instruments to cope with food price volatility have been scrutinised by the international community since 2008. But while historically low levels of grain reserves are unanimously highlighted as a major cause of the food price crisis, food reserves have been largely absent from the international agenda – apart from in relation to emergency responses.

The option of establishing national food reserves has been brushed aside using the same arguments that led to their dismantling in the 1990s. Despite the fact that the recent food price fluctuations reflect 'a collapse in market confidence', as underlined by Justin Lin, Chief Economist at the World Bank, world leaders are still prescribing the same policy measures to deepen market integration.

But what can the market do to feed the people who are now living in extreme poverty because of the global economic collapse? Feeding people who have no purchasing power is not covered by market strategies. Will poor countries be able to buy their food in international markets at times of crisis, when their lack of foreign currency does not allow them to compete with other buyers? Will millions of poor consumers be able to buy food at affordable prices, when biofuel producers and better-off consumers are willing to pay more for the same foodstocks?

This briefing paper argues that local and national food reserves can play a vital role in price stabilisation and food security policies. Food reserves have long been out of fashion. But it's high time to look again at the evidence. Examples from Indonesia, Madagascar and Burkina Faso demonstrate that if properly designed, national food reserves can be effective. Some G20 countries and international institutions are starting to look at this. It's high time they all do, without prejudice.

Food reserves can indeed be an instrument – when combined with other measures – to support domestic productivity gains, thus lowering net food importing countries' dependence on international markets and enhancing national food security.

Policy makers need to learn from past experience, but solutions also need to be adapted to the context. Regulating markets does not necessarily mean carrying out highly interventionist policies. The time has come to reassess the potential of food reserves in the context of more integrated but also more volatile agricultural markets, and to experiment with innovative and complementary instruments that can improve the efficacy of food reserves, while at the same time addressing market failures and providing benefits and incentives to small-scale farmers.

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PERSUADING G20 LEADERS TO PUT FOOD RESERVES ON THE AGENDA

'I think that we've got to stockpile food reserves at a global level more effectively than we have in the past.'

Barack Obama, comments on the 'global food crisis' during a Q&A session, 10 June 2008²

Price shocks and turbulent economic times have stimulated international interest in grain reserves in the past. Following World War II and up until 1969, the International Wheat Agreements were successfully negotiated among major wheat exporters and importers. Then in 1974, at the World Food Conference, the US President Gerald R. Ford spoke in favour of an international grain reserves system,³ following the 1973/74 price shocks. But negotiations held by the United Nations Conference on Trade and Development (UNCTAD) four years later collapsed due to the lack of agreement among stakeholders on trigger price, and stocks levels, and who was to contribute.⁴

After decades of low interest in stockholding policies, the 2007–08 food price crisis put food reserves back on the agenda, and in July 2009, at the L'Aquila Summit, G8 leaders agreed to further explore 'the feasibility, effectiveness and administrative modalities of a system of stockholding... as a means to limit price volatility'.⁵ However, in their draft report to G20 dated May 2011 named 'Price Volatility in Food and Agricultural Markets: Policy Responses',⁶ the international institutions only make a very quick review of food reserves, and conclude that 'as attempts to stabilize food prices have proved either costly or ineffective, market based initiatives may be superior in countering food price volatility and enhancing food security in developing countries'.⁷

Current stock levels put food security at risk

It is widely recognised that the level of world stocks of cereals – both private stocks and those of the main producer countries – influences the stability of international markets. Historically, when global stocks of cereals fall below 15 to 20 per cent of world consumption,⁸ large price increases and a breakdown of functioning markets follows. The three main price spikes seen on world cereals markets in the past 50 years – :1973/74, 1995/96 and 2007/08 – have coincided with low stock-to-use ratios.⁹ In 2007, this ratio reached 16.5 per cent of global grain production – the lowest level since 1973.¹⁰ This earlier low point also led to a global food crisis, in 1974.

Cereal production growth in the major producing countries significantly declined between 1980 and 2000,¹¹ resulting in major changes in world markets. China replaced the USA as the major stock-holder, with 50 per cent of world stocks of wheat during the 1996–2000 period.¹² But following some deficient harvests that affected its stocks, world stocks of cereal collapsed to just two months' worth of consumption in 2009.¹³

Today, there is no country or co-ordinated international mechanism that performs the role of market stock-holder. Relying on private stocks may also prove to be a risky strategy. Private producers have no incentive to hold a 'socially optimal level of stocks';¹⁴ moreover, private stocks are spread across producers, traders and sellers, and thus difficult to track.

Despite a relative increase in cereals in 2009/10 following a good harvest, global grain stocks decreased again by 15 per cent in early 2011.¹⁵ This could result in the world stocks-to-use ratio for grains falling to 17.1 per cent¹⁶ at the end of 2011, putting food security at risk. In their report to G20 leaders 'Price Volatility in Food and Agricultural Markets: Policy Responses', international institutions warn of a high risk of volatility in prices in the coming years. Even expectations of depleted stocks may be enough to raise prices sharply.

Given the high level of risk and the reluctance of G20 leaders to build global grain reserve mechanisms, Oxfam believes that developing countries – especially those that are dependent on food imports – should be encouraged to build food reserves, or buffer stocks, at regional, national and local levels in order to limit price surges and as part of a broader strategy to enhance their national food security.

FROM IDEOLOGY TO REALITY

'While reserves are costly to hold and difficult to manage, the costs of holding a public grain reserve can be viewed as expenditure for a public good.'

Justin Lin, Senior Vice President and Chief Economist at the World Bank, 17 October 2008

The cost of not having food reserves

There are, of course, certain costs associated with holding and operating a food reserve. As the international institutions stated in their report to the G20: 'domestic procurement, food releases from buffer stocks and trade programmes require continuing budgetary allocations to cover any operational losses occurring in domestic and international trading', and 'the operational costs of buffer stocks are significant'.¹⁷

However, the human, political and economic costs of *not* having a food reserve are even greater. Following the dramatic food price increases in 2007–08, an estimated 150 million people joined the ranks of those who go hungry. Food price surges are disastrous for people living in poverty in developing countries, who spend as much as three-quarters of their income on basic foodstuffs. For these families, even small price increases put severe pressure on household finances and force them to reduce spending on education and health. Among poor families, women and children are worst affected; they eat last and least, and are more likely to suffer ill health as their diet lacks nutritious foods. Given that most small-scale producers are also net food buyers,¹⁸ they are also directly affected.

The acceptability and legitimacy of the costs of food reserves can only be truly appreciated in view of these dramatic consequences of sudden price spikes. From this perspective – unfortunately one that is rarely adopted by donors and international institutions – the costs of maintaining a reserve are a necessary expenditure.

Analysis of the 2007–08 food price crisis reveals that the costs of operating a food reserve need not be as high as one might imagine. According to Justin Lin, Senior Vice President and Chief Economist at the World Bank, a 'relatively small' difference in stock levels might have made all the difference between 'too little and adequate stocks'. As he explained: 'The difference in global ending-year stocks in 2004/05 and 2007/08 was only about 60 million tonnes – only about 2.7 percent of global production.'¹⁹

Recent research has shown that an additional 105 million tonnes of cereals stored around the world, which would have been sufficient to avoid the global market disruption of 2007–08, would have cost \$1.5bn, at the lowest storage price possible.²⁰ Perhaps seeing this cost in human terms is helpful to those decision makers who are trying to determine whether the cost of maintaining extra stocks is acceptable or prohibitive: \$1.5bn represents \$10 for each person who joined the ranks of the hungry as a direct result of the 2007–08 food price surge.²¹

Who bears the cost of a food price crisis?

Developing countries – and especially Low-Income Food-Deficit Countries (LIFDC) – bear the cost of food price crises. Surges in international prices increase their food bill, forcing governments to use restrictive monetary policies that are detrimental to local producers, and increase problems linked to balance of payments and budgets.

From 2005 to 2010, the LIFDC food import bill almost tripled, from \$58.3bn to \$163.6bn, rising by 23 per cent a year on average.²² For cereals only, the average annual import bill for LIFDC was \$12.3bn from 2001 to 2005. This rose to an average of \$25.6bn between 2006 and 2010.²³

At the macro-economic level, sub-Saharan African states estimate that the cost of various fiscal measures (tax and customs exemptions on food subsidies, food price controls and wage increases) accounted, on average, for 5 per cent of gross domestic product (GDP) in 2008.²⁴ Increased food prices pushed inflation rates up across the developing world in 2008, and access to credit became more difficult as global liquidity sources contracted and developing countries tightened monetary policies in response to the financial crisis.

The rising price of food also has a direct impact on food aid delivery. According to the World Food Programme (WFP), 4.5 million tonnes of wheat, maize, rice and sorghum were delivered in 2008, at a cost of \$1.6bn. However, had 2000 prices prevailed, the deliveries could have been tripled in 2008.²⁵ In 2009, when the level of need was highest, global food aid deliveries stood at 5.7 million tonnes – the lowest level since 1961.²⁶ In 2011, WFP needs to raise \$3.75bn to meet the most urgent needs. By early March, total contributions accounted for only \$824m.²⁷

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BUILDING THE CASE FOR FOOD RESERVES

'Food reserves could be used to support the income of farmers, buying at a good price and then make food affordable during times of rising prices. If a food reserve is well managed and transparent, it could limit volatility and secure incomes.'

Olivier De Schutter, United Nations Special Rapporteur on the Right to Food, January 2011²⁸

Given the reluctance of world leaders to build global grain reserve mechanisms, countries that are dependent on imports should consider establishing national strategic reserves as part of a policy for domestic food security. According to the FAO, 35 countries released public stocks during the 2007–08 food crisis.²⁹ In India, a massive purchase of rice and wheat in 2008 enabled the government to release sufficient stocks into the market to stabilise prices.³⁰

Limited public stocks and a shortage of foreign exchange have posed a major challenge to food security in many food-deficit developing countries, which have imported much less than they needed, and had to appeal for food aid or external support to bridge the gap.

Setting the rules

Buffer stocks are often associated with monopolies or tight controls on trade, marketing, sale and even production, and have been blamed for discouraging or damaging private activities in developing countries. The international institutions also report that 'poor management makes buffer stocks ineffective... There is repeated evidence that releases are made too late to influence food prices or to safeguard food security. Abrupt and unpredictable changes in buffer stock operations raise market risk significantly and discourage private investment.'³¹

If food reserves have been poorly managed in the past or have not contributed to food security or price stability in many instances, this does not mean that the policy tools themselves are unable to stabilise prices. One could rather argue for better implementation of policy and better governance of food reserves to avoid patronage or damaging time lags between government announcements and the actual implementation of policy measures.

Adopting 'rules-based' approaches, whereby leaders are committed to acting according to pre-defined rules and triggers, may reduce the level of policy uncertainty and contribute to broader grain market development. Improved management would also imply investing in training and research to improve the capacity of implementing agencies to adapt the key parameters, including the size of the stocks needed or the domestic price band level (bearing in mind international trends). Finally, ensuring that farmers' associations, the private sector and civil society organisations have the chance to actively participate in the governance and management of public stocks could significantly increase their transparency and accountability.

G20 leaders are concerned about a possible return to food reserve policies, but it should be borne in mind that taking a highly interventionist approach does not have to be the only way. Oxfam believes that governments should retain the ability to regulate the

market to achieve their national food security objectives. But this should be within a clear and transparent framework of credible commitment to support investment in the development of sustainable, resilient and productive smallholder agriculture. Past experiences show the benefits of government intervention when it is restricted to avoiding market failures, making markets work more efficiently, or even creating markets when they do not exist – rather than substituting public activities for private activities. For example, from 1975 to the 1990s, Indonesia's food reserves have been efficient by just controlling around 10 per cent of the country's rice market (see Box 1 below). The government created institutions to promote savings and encouraged investment in transport infrastructure and market-places, while maintaining a price band (defining the floor and ceiling prices) wide enough to promote private activities when capital markets were particularly weak.

Box 1: Indonesia: public rice procurement

During the 1970s and 1980s, Indonesia's rice policy aimed to ensure that poor consumers would have access to adequate and affordable rice, and rice farmers would get reasonable returns for their produce. The price policies included public storage of rice and setting the floor and ceiling prices. The National Logistics Agency, BULOG (Badan Urusan Logistik), managed local agencies at the district level; it bought rice when necessary to lift the price on rural markets to the floor price, and stored it in warehouses, while rice was traded at the wholesale level. These rice stocks, accumulated through domestic procurement and imports (BULOG also had control over international trade), were then used to defend a ceiling price in urban markets.

Stable rather than high prices gave farmers the confidence to make the necessary investments to raise productivity.³² Rice profitability came primarily from massive public investments in the rice sector: from the rehabilitation and construction of irrigation facilities (3.7 million hectares between 1969 and 1989),³³ market-places, roads and ports, and from technical advice and dissemination of technical packages, including high-yielding varieties and fertiliser (fertiliser use increased by 500 per cent between 1970 and 1985).³⁴

Rice production grew by nearly 150 per cent between 1968 and 1989³⁵ and Indonesia, which was routinely the world's largest importer in the mid-1970s – often with one-fifth of the rice supplied internationally– reached self-sufficiency in 1984. At the same time, rice consumption increased dramatically, especially among poor families. Rural poverty fell from 40 per cent in 1976 to 21 per cent in 1987,³⁶ followed by a huge improvement in food security; the percentage of people suffering from malnutrition fell from 24 per cent (1979 to 1981) to 13 per cent (1995 to 1997).³⁷ According to macro-economic assessments, the rice price stabilisation programme also generated nearly one percentage point of economic growth each year from 1969 to 1974.³⁸

A number of caveats should nevertheless be made concerning the governance of Indonesia under Suharto's New Order regime, which was characterised by severe repression against the Communist Party (PKI) and oppression of independent farmers' organisations.

However, despite the critique on political legitimacy, Indonesia's experience shows that government intervention can be highly adaptive to a changing

context and can contribute to rapid economic growth, while at the same time promoting the development of the domestic market. From 1975 to 1985, public procurements never exceeded 12 per cent of total production and 15 per cent of consumption (10 per cent in normal years),³⁹ while the ceiling price for consumers was maintained around the international price level.

Consequently, the efficiency of the private marketing structure was always crucial for Indonesia. The price band was set in order not to discourage private trade. The margins were primarily determined with reference to the storage and distribution costs incurred by the private sector. The band was progressively widened⁴⁰ once the country had reached self-sufficiency. At this time, Indonesia also lowered its stocks to give more flexibility to the system, and was even more effective at stabilising domestic prices.⁴¹

In order to achieve this, BULOG invested significantly in leadership and staff training, allowing regular updates of the rice floor and ceiling prices, as well as the size of buffer stocks needed, or the amount of fertiliser subsidies. Integration into macro-economic policy making and access to financial resources were also vital to the agency's success in stabilising domestic prices.

After the Asian financial crisis of 1997, Indonesia's economic growth was drastically curtailed and it had to call in the International Monetary Fund (IMF) to avoid economic collapse. In return, the IMF subjected the government to severe pressure to scale down BULOG activities and limit public interventions in the rice market.⁴²

Using innovative instruments as part of a global food reserve strategy

Locally owned and well-managed mechanisms can reduce people's vulnerability to natural disasters, seasonal market fluctuations, and supply shocks, as well as the need for international food aid. As such mechanisms are based on local producers, they also have potentially strong leverage on local food production and rural incomes. For many years, Oxfam has supported community grain banks through livelihood programmes. Cereal banks and warehouse receipt systems allow decentralised or community-based systems of food management that are designed to protect farmers and consumers against market fluctuations.

Experiences with warehouse receipt systems have proved that they can be strong instruments in promoting farmers' storage capacity. In several East African countries, such systems have enabled farmers to obtain greater benefit from marketing activities, while also acting as a valuable source of credit in rural areas, which tend to be neglected by the formal banking sector.

Box 2: Madagascar: inventory credit to improve food security

In Madagascar, in 1993, the Association for Farmers' Progress, FIFATA (Fikambanana Fampivoarana ny Tantsaha or Association pour le Progrès des paysans), set up mutual agricultural savings and credit banks (Caisses d'Épargne et de Crédit Agricole Mutuels, or CECAM) to develop credit services for its members. Today, CECAM provides rural households with a range of innovative financial products, from farming loans to loans to cover family emergencies. Its services include a rice inventory credit product, called the Common Village Granary⁴³ (CVG), which has the stated aim of 'helping the peasant farmer to master the prices of his products from harvest to commercialisation'.⁴⁴

The CVG mechanism allows producers to store part of their harvest for consumption or for sale until the lean season, when local market prices are higher. Since the only collateral required is rice stock, and the minimum quantity is just 75kg,⁴⁵ it is easily accessible to small-scale rice producers. With an interest rate of 3 per cent, the level of repayment has always been close to 100 per cent. Most farmers use the CVG combined with other financial products from CECAM, such as the farming loans.⁴⁶

CECAM's network has expanded rapidly, and by the end of 2008, it had 110,000 members (twice the number it had in 2003), of which 30 per cent were women.⁴⁷ It operates a highly decentralised system, with a large number of small stores. Overall, capacity is estimated at about 55,000 tonnes.⁴⁸

The CVG allows poor households to economise on their annual food bill and acts as a consumption smoothing device. At the same time, it allows other farmers to get better access to the rice market and to engage in off-season productive activities.

An innovative approach to developing public sector procurement of goods held on warehouse receipts is under way in Zambia, through the WFP Purchase for Progress (P4P) programme.⁴⁹ By purchasing and carrying warehouse receipts, which guarantee availability, quality and quantity of the stock in certified warehouses, governments could indeed lower the burden of stock management, while creating a more predictable environment for private activities. These systems may also help the government to collect more accurate data on the amount of private stockholding, which it could use to inform decisions about how much to import at times of scarcity on the domestic market.⁵⁰

Other studies are also being carried out to analyse how market instruments could be used to better manage national food reserves. In Zambia, a proposal from the United States Agency for International Development (USAID)⁵¹ includes using ZAMACE, the Zambia Agricultural Commodity Exchange, supported by a warehouse receipts system, with both local food and import options. The aim is to enhance the country's capacity to maintain food price stability while fostering long-term increases in farmers' output and supporting development of the market.

A number of recent studies⁵² have analysed the potential of hedging instruments such as futures and options to reduce some of the uncertainty and risks associated with food imports for developing countries. But almost none of these studies have assessed the potential

of these instruments to improve the management and efficacy of food reserves. Call options, that give the government the right – but not the obligation – to buy the commodity at a set price and at a set time in the future, may yet lower the level of actual stocks needed by a country and add transparency by setting clear rules for government interventions. It may also reduce the vulnerability of national reserves to speculative attacks. By buying call options, the government would send a signal to potential speculators that would discourage them from hoarding in order to take advantage of expected profits, since imports at a previously set price would cover a potential exhaustion of national stocks.

Finally, the 2007–08 food price spike has raised interest in creating a regional food reserve among bodies such as the Association of Southeast Asian Nations (ASEAN), Economic Community of West African States (ECOWAS) in West Africa and the Southern African Development Community (SADC), whether this would mean joint efforts to co-ordinate State-owned reserves or whether it would be a reserve managed by an independent regional body. Having a food reserve at regional level would help governments to smooth out and manage differences between areas with food surpluses and those with shortages within the same region. Regional reserves may also enhance price stabilisation due to the wider scope of the supply and distribution system, enabling economies of scale and therefore lower costs. Last but not least, the monitoring required at supra-national level could help prevent individual governments from monopolising reserves for short-term political gain.⁵³

Public procurement from smallholders: a tool to enhance food security

While national food reserves may have the specific objective of supporting smallholders, past experience shows that setting a floor price for public procurements is a necessary measure, although not often sufficient in itself. Most smallholders do not produce enough to meet their subsistence needs so they are food purchasers, or they may just be able to meet their own food requirements but need specific complementary support to take full advantage of public procurement programmes. This is particularly true for women. Though women produce 60 per cent to 80 per cent of food in most developing countries,⁵⁴ investments in food production typically target men rather than women because it is assumed that knowledge of these will be shared throughout the family.⁵⁵ Yet, often, this information is unsuitable for women's needs. Gender is also a fundamental determinant of access to land, credit, training and control over production. It is therefore essential for public programmes to address these specific constraints in order to realise women's potential.

Several attempts have been made to implement public procurement schemes involving smallholders, such as the Brazilian programme *Fome Zero* (Zero Hunger) or the innovative P4P programme from WFP (see Box 3 below for more on the P4P programme in Burkina Faso). Though both schemes do not aim to lower food price volatility with buffer stocks, they offer useful lessons for governments planning to build food reserves while also supporting small-scale farmers' productivity gains.

In Brazil, for example, smallholder agriculture produces 70 per cent of domestic food consumption. Despite using only one-quarter of the country's cultivated land, the sector supplies 38 per cent of the agricultural gross national income (GNI), guarantees national food security and employs three out of every four workers in rural areas. Through the National Supply Company (CONAB), the Brazilian government purchases food from small-scale farmers without requiring tender procedures, provided that their prices are no higher than those prevailing in regional markets. The food products that are bought are used to supply public programmes in schools and hospitals. In early 2009, the Food Procurement Programme had already invested around \$646m to buy 1.25m tonnes of food products from 86,000 small-scale farmers.⁵⁶

Box 3: Burkina Faso: WFP's Purchase for Progress programme

The World Food Programme set up its Purchase for Progress (P4P) programme in Burkina Faso in 2008.⁵⁷ Small-scale farmers account for 70 per cent of agricultural production in the country, but productivity levels are low and farmers are largely dependent on uncertain rainfall. The programme proposes forward contracts (with defined quantities and prices) to smallholder farmers' organisations, to assure them a guaranteed market at planting time, therefore encouraging increased production and facilitating members' access to credit, which is crucial for buying fertiliser or seeds. The programme also works with local partner organisations to provide training in quality management, storage and contracting.

In Mali and Burkina, these contracts totalled over 3,700 metric tons of sorghum, millet, beans and maize, to be delivered after the harvest at the end of 2010. However, only 1,200 metric tons have actually been delivered to WFP so far, mainly because some farmers' organisations in Burkina were not able to meet WFP's quality specifications.⁵⁸

WFP is looking at ways to overcome this problem through training programmes to enhance farmers' organisations' knowledge of quality issues and their capacity for commodity management. In Burkina Faso alone, the P4P programme plans to purchase 16,800 metric tons of food through direct and forward contracting over the next five years.⁵⁹

RECOMMENDATIONS

Developing countries should retain the ability to develop and regulate their domestic food markets and contribute to their food security objectives by mitigating price volatility through buffer stocks by:

- Setting a durable, transparent framework and adopting clear rules and triggers, such as price band and stock-to-use ratios, for public interventions in buffer stocks;
- Promoting public procurement from smallholders at a sufficient price, together with targeted support programmes such as access to credit, inputs and training;
- Developing strong institutional capacities to regularly update key parameters (e.g., the level of stocks needed, trend in market prices, etc.) and to adapt quickly to ever-changing realities;
- Ensuring efficient and accountable governance, with the active participation of farmers' organisations, the private sector and civil society organisations. This needs specific support to smallholders and women's organisations to develop their capacities to engage meaningfully in the management of food reserves at local and national levels;
- Developing synergies and complementarities between local, national and regional reserves to strengthen local food security and enhance regional trade.

G20 members, donors and international institutions should:

- Provide technical and financial support to developing countries for the creation and management of food reserves at local, national and regional levels, in order to limit price surges and as part of a broader strategy to enhance national food security;
- Support innovative approaches and instruments to improve the management and efficacy of food reserves in the current context of integrated food and agricultural markets.

NOTES

- 1 Nicolas Sarkozy (2009) Speech on 'The Future of Agriculture', 19 February.
- 2 'Obama says "Stockpile food reserves"', Survival Food – Freeze Dried & MRE website, <http://bulk-survival-food.com/obama-says-stockpile-food-reserves/97>
- 3 S. Murphy (2009) 'Strategic Grain Reserves in an Era of Volatility', Minneapolis: Institute for Agriculture and Trade Policy (IATP).
- 4 S. Wiggins and S. Keats (2010) 'Grain Stocks and Price Spikes', Overseas Development Institute (ODI), <http://www.odi.org.uk/resources/details.asp?id=4705&title=grain-stocks-price-spikes>
- 5 'L'Aquila Joint Statement on Global Food Security', L'Aquila Food Security Initiative (AFSI). Endorsed by the G8 and by Algeria, Angola, Australia, Brazil, Denmark, Egypt, Ethiopia, India, Indonesia, Libya (Presidency of the African Union), Mexico, the Netherlands, Nigeria, People's Republic of China, Republic of Korea, Senegal, Spain, South Africa, Turkey, Commission of the African Union, FAO, International Energy Agency (IEA), International Fund for Agricultural Development (IFAD), International Labour Organization (ILO), IMF, Organisation for Economic Co-operation and Development (OECD), The UN Secretary-General's High-Level Task Force (HLTF) on the Global Food Security Crisis, WFP, the World Bank, and the World Trade Organization (WTO) (who all attended the food security session at the G8 Summit in L'Aquila on 10 July 2009) and by the Alliance for a Green Revolution in Africa (AGRA), Bioversity International/Consultative Group on International Agricultural Research (CGIAR), the Global Donor Platform for Rural Development, and the Global Forum on Agricultural Research (GFAR).
- 6 At the G20 Seoul Summit held in 2010, G20 leaders agreed on a 'Multi-year Action Plan on Development' in which they "request that FAO, IFAD, IMF, OECD, UNCTAD, WFP, the World Bank and WTO work with key stakeholders to develop options for G20 consideration on how to better mitigate and manage the risks associated with the price volatility of food and other agriculture commodities without distorting market behavior, ultimately to protect the most vulnerable." In May 2011, these international institutions submitted their second draft to G20 leaders: FAO, IFAD, IMF, OECD, UNCTAD, WFP, the World Bank, the WTO, International Food Policy Research Institute (IFPRI) and the United Nations High Level Task Force on the Global Food Security Crisis (UN HLTF) (2011) Price Volatility in Food and Agricultural Markets: Policy Responses. Policy Report to G20
- 7 FAO, IFAD, IMF, OECD, UNCTAD, WFP, the World Bank, the WTO, IFPRI and the UN HLTF (2011) Price Volatility in Food and Agricultural Markets: Policy Responses. Policy Report to G20, p. 28.
- 8 Wiggins and Keats, op. cit.
- 9 Wiggins and Keats op. cit. also note that the 20 per cent threshold was breached in 2003/04, but that the release of Chinese stocks onto the world market prevented a price spike occurring at this time. According to Wiggins (2010), prices of maize rose by 90 per cent from January 1995 to the peak in the first half of 1996, rice prices rose by 30 per cent, and wheat by 70 per cent.
- 10 J. Lin (2008) Prepared Remarks. Roundtable on 'Preparing for the next global food price crisis' organised at the Center for Global Development, The World Bank.
- 11 Between the 1970-80 period and 1990-2000 period, the average annual cereal production growth rates declined from 4.9 to 2.1% in China; 2.2 to 1.6% in the EU; 0.1 to -4.3% in the ex-USSR; 5.1 to 1.9% in the US. Source : B. Daviron (2009) 'La forte volatilité des prix depuis 2007/08 – Analyse des facteurs conjoncturels ainsi que des facteurs spéculatifs ayant exacerbé la hausse', CIRAD/Agricultural Research for Development.
- 12 B. Daviron (2009) 'La forte volatilité des prix depuis 2007/08 – Analyse des facteurs conjoncturels ainsi que des facteurs spéculatifs ayant exacerbé la hausse', CIRAD/Agricultural Research for Development.
- 13 Ibid.
- 14 D. Ray, cited in Murphy, op. cit.
- 15 Volatility of Commodity Prices, op. cit.
- 16 FAO Outlook, November 2010, <http://www.fao.org/docrep/013/al969e/al969e00.pdf>
- 17 Price Volatility in Food and Agricultural Markets, op. cit.
- 18 T. Cavero and C. Galián (2008) 'Double-Edged Prices. Lessons from the food price crisis: 10 actions developing countries should take', Oxfam Briefing Paper 121. Oxford : Oxfam International.
- 19 Lin, op. cit.
- 20 Wiggins, S., Compton, J. and Keats, S. (2010) 'Preparing for Future Shocks to International Staple Food Prices. What Can the International Community and the UK Government Do to Help?' London: Overseas Development Institute, <http://www.odi.org.uk/resources/download/5095.pdf>
- 21 Author's calculation
- 22 Author's calculation based on FAO Food Outlooks (2004–10)
- 23 Author's calculation based on FAO Food Outlooks (2004–10)
- 24 Volatility of Commodity Prices, op. cit.
- 25 WFP 2008 Food Aid Flows: <http://home.wfp.org/stellent/groups/public/documents/newsroom/wfp205880.pdf>
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