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## Technical information note

# Rising food prices and their implications for employment, decent work and poverty reduction <sup>1</sup>

## Introduction

The trend towards rising food prices, as observed over the past three years, accelerated significantly in 2008. The resulting global food crisis has serious implications for efforts to attain the Millennium Development Goals, especially Goal 1 on the eradication of extreme poverty and hunger and the global goal of achieving decent work for all. <sup>2</sup> This is principally because the poor typically spend a larger share of their incomes on food and are, therefore, the most vulnerable to increases in the prices of food. While some people are adversely affected by higher food prices, however, others benefit from them, depending on whether they are net producers or consumers of food staples and the extent to which wages are adjusted to reflect higher food price inflation. <sup>3</sup>

## 1. Recent trends in the prices of major food grains, major causes and prospects

### 1.1. Recent trends

Between March 2007 and March 2008, the price of wheat increased by 130 per cent, and that of rice by 74 per cent. <sup>4</sup> In April 2008, the price of rice shot up to nearly US\$900 per tonne compared to a little over \$300 per tonne in January 2007 – a threefold increase in just over a year. During the same period, the price of corn increased by 87 per cent. These price increases came after a long period of relatively low and stable food grain prices. In fact, real food prices registered a decline (of 75 per cent) during the period 1974–2005. <sup>5</sup> Overall, during the 36-month period leading up to February 2008, global food prices rose

<sup>1</sup> This note was prepared by R. Islam and G. Buckley of the ILO Employment Sector. The opinions expressed in it are those of the authors and do not necessarily reflect the official views or policies of the ILO, except when explicitly stated.

<sup>2</sup> This brings into sharp focus many of the issues and challenges raised in ILO: *Promotion of rural employment for poverty reduction*, Report IV, International Labour Conference, 97th Session, Geneva, 2008.

<sup>3</sup> For more details on this and other aspects of the global food crisis and its implications for poverty reduction, see R. Islam, *Global food crisis, poverty and decent work*, ILO Employment Sector, Apr. 2008 (mimeo).

<sup>4</sup> *The cost of food: Facts and figures*, BBC, 8 Apr. 2008, <http://news.bbc.co.uk/1/hi/world/7284196.stm> (accessed 19 May 2008).

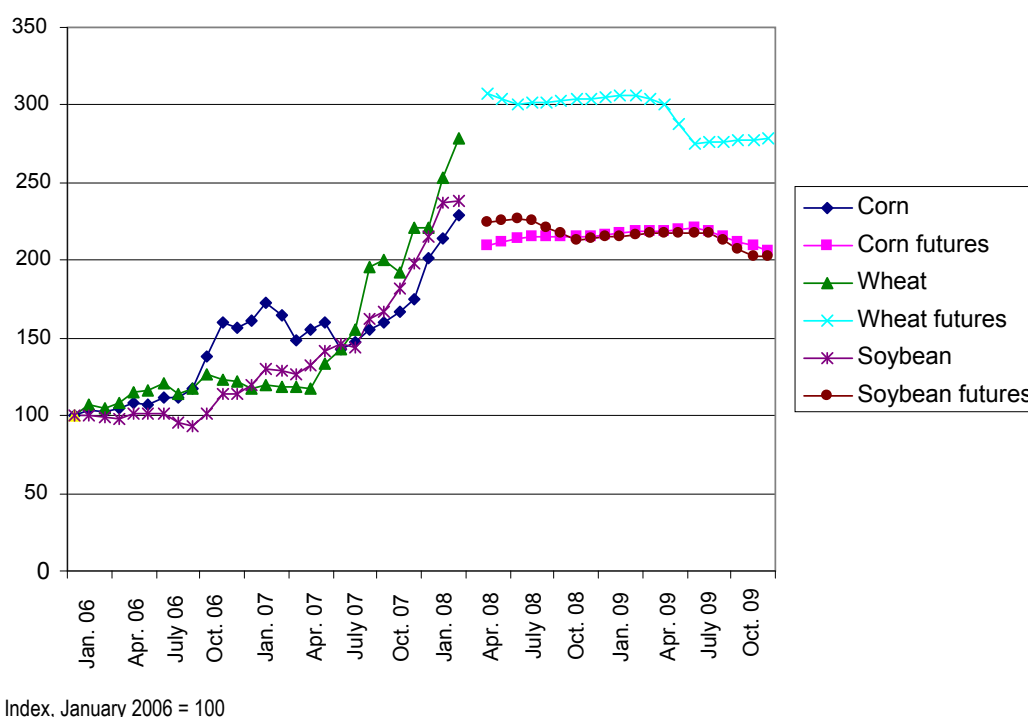
<sup>5</sup> International Relations and Security Network/ISN Security Watch: *The price of food: Global crisis ingredients*, [www.isn.ethz.ch/news/sw/details.cfm](http://www.isn.ethz.ch/news/sw/details.cfm) (accessed 19 May 2008).

by 83 per cent. In some countries, rising food prices have provoked panic and social unrest.

These trends have had macroeconomic impacts, affecting budget deficits, trade balances and inflation. For example, it is estimated that food price increases accounted for almost 45 per cent of global headline inflation in 2007 (compared to about 27 per cent in 2006) with the impact being much greater for developing countries.

Food prices are expected to peak in 2008 and are forecast to ease only gradually thereafter, as illustrated in figure 1. Although food price cycles have in the past averaged about three years, with supply responding quickly to changes in demand conditions, the current cycle is expected to last longer due to the structural factors discussed below.

**Figure 1. Selected food prices**



Source: International Monetary Fund (IMF): *World Economic Outlook – Housing and the Business Cycle*, IMF, Washington, DC, Apr. 2008, p. 60.

## 1.2. Major causes

A number of factors are contributing to the sharp increases in global food prices.

- A major factor is the increase in the demand for food grains arising from **an increase in incomes, especially in emerging market economies**, with China being the most obvious case in point (figure 2).<sup>6</sup> Beyond a certain level, however, a rise in incomes does not cause a direct increase in the human consumption of food grains. In fact, per

<sup>6</sup> J. von Braun, Director-General of the International Food Policy Research Institute (IFPRI), argues that high income growth accounts for perhaps half of the recent increases in food prices, with biofuels accounting for a further 30 per cent. Cited in J. Borger: “Feed the world? We are fighting a losing battle, UN admits”, in *The Guardian* (London), 26 Feb. 2008.

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capita consumption of food grain declines as incomes increase. A rise in income actually leads to an increase in the demand for meat and dairy products,<sup>7</sup> which, in turn, leads to an increase in the demand for grains as animal feed.<sup>8</sup> According to one estimate, of the 2.1 billion tonnes of grain harvested globally in 2008, only half will be consumed by humans. The rest will be used for animal feed or for converting into biofuels.<sup>9</sup>

- Another major factor driving up food prices is **increased biofuel production**, which reflects concerns over rising oil prices, energy security and climate change.<sup>10</sup> Rising oil prices increase the costs of key inputs for agriculture such as fertilizers (the cost of urea, a fertilizer, has almost tripled since 2003) and also drive up transport costs (refrigeration, shipping and distribution costs weigh heavily in most food value chains) and have led to increased demand for biofuel raw materials such as wheat, soy, maize and palm oil and to increased competition for cropland. Increased prices for these commodities have affected demand for other foods through cost-push and substitution effects. In some cases, increased demand for biofuel raw materials is driven by subsidies provided by some governments to promote biofuel production.<sup>11</sup>

<sup>7</sup> In China, for example, per capita meat consumption has increased from 20 kg in 1980 to 50 kg now. See FAO: *Growing demand on agriculture and rising prices of commodities*, Paper prepared for a round table discussion organized during the 31st Session of the Governing Council of the International Fund for Agricultural Development (IFAD), Rome, 14 Feb. 2008.

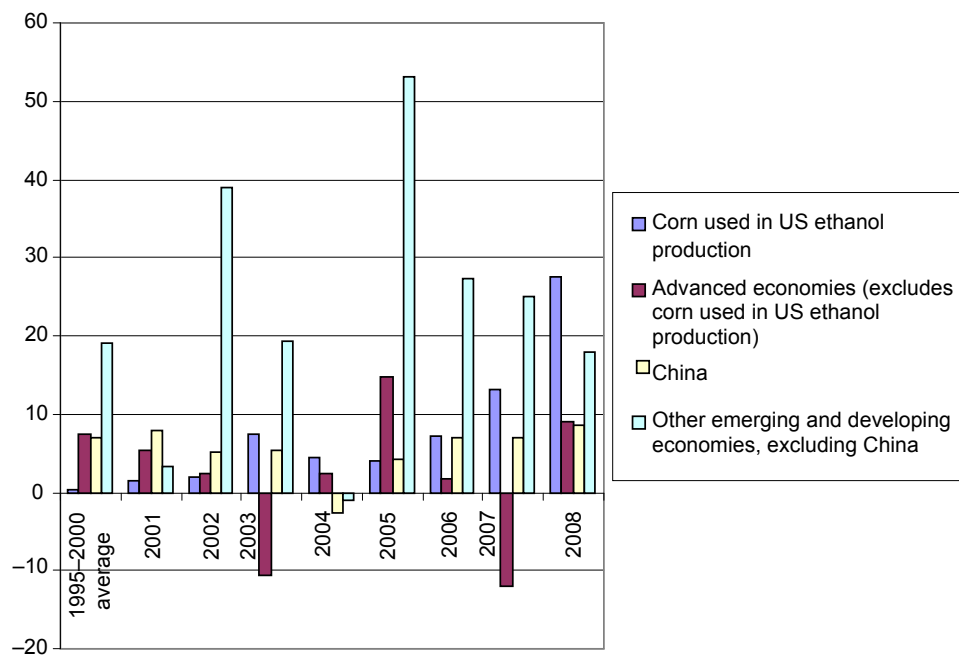
<sup>8</sup> It may be noted in this context that the production of 1 kg of beef requires an estimated 7 kg of grains, while for pork and chicken the corresponding conversion ratios are 4:1 and 2:1 respectively. See L. DeRose, E. Messer and S. Millman: *Who's hungry and how do we know?: Food shortage, poverty and deprivation*, United Nations University Press, 1998, p. 55.

<sup>9</sup> Estimates by FAO quoted in *The Guardian* (London), 15 Apr. 2008.

<sup>10</sup> According to J. Currie in an interview with FT.com of 19 July 2007, since food can now be converted into fuel, there is effectively an arbitrage relationship between the two, implying an ongoing linkage between food and fuel prices. Cited in A. Evans: *Rising Food Prices: Drivers and Implications for Development*, Chatham House, Royal Institute of International Affairs, London, Apr. 2008.

<sup>11</sup> According to the International Institute for Sustainable Development, the United States spends about \$7 billion a year supporting ethanol (see [www.iisd.org/pdf/2007/media\\_grain\\_journal.pdf](http://www.iisd.org/pdf/2007/media_grain_journal.pdf)). Corn-based ethanol supplies are expected to be spurred by the mandate in the United States energy bill to quintuple the production of ethanol by 2022. If the mandate under the bill is met on schedule, about half of the entire corn crop of the United States will have to be set aside for ethanol by the middle of the next decade, even assuming that cellulosic ethanol becomes commercially available in about five years. The European Union has set a target for 10 per cent of its transport fuel to come from biofuels by 2020 and this will also have implications for the balance between crop production for fuel and food.

Figure 2. Demand for major food crops



(Demand = difference from previous year in millions of tons).

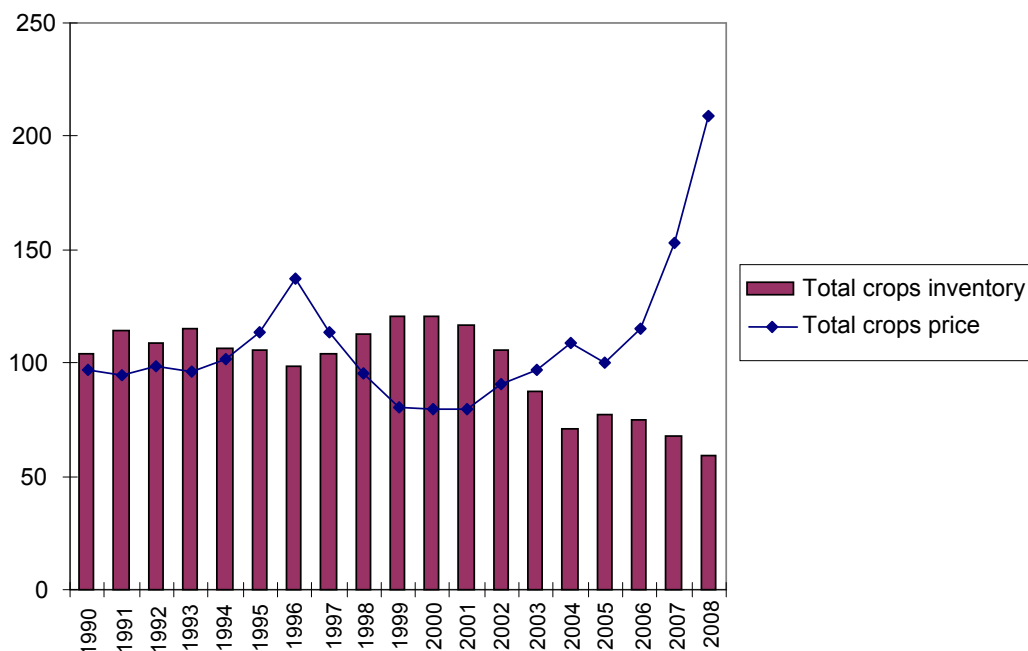
Source: IMF, op. cit., p. 60.

- A number of longer term factors have caused a steady **decline in investment in agriculture and rural areas**, which has constrained supply-side responses to increased demand for certain food crops. Both public and private investment in agriculture and rural areas has declined over the past two decades. Publicly funded agricultural research and extension has declined rapidly in many developing countries and has often particularly affected small farmers, whose access to finance for investing in their farms is usually severely constrained, but who play an important role in producing food grains. Natural factors, such as droughts, have affected agricultural production in some countries and have caused supply-side problems which have fuelled local price rises but, overall, these have been largely offset by good yields and increased exports in other countries and, would not, on their own, have had a significant impact on global food prices.
- **Historically low stocks of grains** have constrained supply-side responses. Stocks have fallen as demand consistently outstrips supply, but in an era of globalization and free trade and finance flows, many governments no longer see it as so essential to maintain large stocks of food grains. The result is evidenced in the fact that there has been a long-term decline in cereal stocks at the global level. However, in response to the depletion of stocks, some countries have sought to establish or replenish stockpiles and strategic reserves – which in turn increases pressure on prices. Data from the Food and Agriculture Organization of the United Nations (FAO) indicate that cereal stocks in 2007 were 13 per cent less than in 2003<sup>12</sup> and the International Monetary Fund (IMF) reports inventories of major food crops (wheat, corn, rice and

<sup>12</sup> See FAO: *Global information and early warning system on food and agriculture: Crop prospects and food situation No. 2*, Apr. 2008.

soybeans) at a two decade low.<sup>13</sup> Figure 3 shows how prices and inventory cover (measured in days of global consumption) have diverged dramatically in the last four years, at a time when inventory cover of major food crops has been at a historically low level.

**Figure 3. Price and inventory cover of major food crops**



Price index 2005 = 100. Inventory cover = days of global consumption.

Source: IMF: op. cit., p. 60.

- **Investor behaviour** has also played a role in driving up food prices, but opinion is divided over how significant a factor this is.<sup>14</sup> Large amounts of money have been flowing into agricultural commodity markets in recent years, accelerating even more rapidly as investors fleeing meltdown in credit markets and seeking safety in commodity markets from the weak dollar and from falling equity and bond markets seek new outlets for diversifying their portfolios. Furthermore, food multinationals have also devoted increased financial resources to these same markets, adding to the upward pressure on prices. In addition, there is a danger that speculative capital has the potential to fuel an “asset bubble” in food commodity markets.<sup>15</sup>
- In some cases, **agricultural trade practices** have exacerbated the problem of rising food prices (for example, when subsidized imports undercut and deter domestic production of food crops or when export bans or taxes are imposed on certain food items, as has recently been the trend in some countries, which ultimately creates a

<sup>13</sup> IMF: *World Economic Outlook – Housing and the Business Cycle*, IMF, Washington, DC, April 2008.

<sup>14</sup> A. Evans, op. cit.

<sup>15</sup> See *Fuelling hunger*, Position paper on the food crisis prepared by the International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers Associations (IUF) (posted on the IUF web site on 28 Apr. 2008).

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feedback loop that eventually drives prices up further). Agricultural tariffs and subsidies in developed countries cost developing countries annually the equivalent of about five times the current levels of overseas development assistance for agriculture.<sup>16</sup>

- **Water scarcity, limited land availability and climate change** are fundamental drivers of long-term increases in food prices. Global demand for water has tripled in the last 50 years. Some 500 million people currently live in countries chronically short of water and this number is likely to rise to 4 billion by 2050.<sup>17</sup> Water shortages will have a particularly onerous effect on countries dependent on limited groundwater resources, such as Egypt, China and Pakistan, and shortages will affect cropping patterns. Not only will it be necessary to increase yields to meet additional demand for food crops, in future an expansion in acreage will also be required; land, however, is in short supply. There is increasing competition for ever-limited land, for food, feed, fibre (timber, paper, etc.), fuel, forest, conservation, carbon sequestration and urbanization, in addition to high rates of soil loss to erosion and desertification. Furthermore, there are likely to be diminishing returns from increased land use, since the infrastructure-related costs of exploiting increasingly marginal or less accessible land are likely to be higher, given that much of the best land is already under cultivation. Climate change will exacerbate land and water shortages and will have a huge effect on agriculture. The Intergovernmental Panel on Climate Change (IPCC) estimates that “climate change increases the number of people at risk of hunger” and will lead to an increase of between 40 million and 170 million in the number of undernourished people.<sup>18</sup>
- A final factor driving price increases is **the prevalence of weak and poorly connected markets in many developing countries**. For example, the absence of a strong linkage between the markets of rural and urban areas (due to poor infrastructure and disconnected domestic supply chains) implies that market signals may not reach farmers in remote rural areas and, as a consequence, these farmers are unable to benefit from the demand that may exist and which may consequently be met by imports. This, in turn, may serve to discourage farmers from making investments that might be profitable and might create a stronger national supply base.

### 1.3. Prospects

Although food prices are expected to peak in 2008, high prices are likely to persist in the medium term given the structural factors mentioned above. It would, therefore, appear prudent to treat the current price increases as irreversible (at least in the short term) and find ways of adjusting to the situation with a particular focus on minimizing the effects on the poor.

<sup>16</sup> See *Rising food prices: Policy options and the World Bank response*, Paper prepared for the Joint Ministerial Committee of the Boards of Governors of the World Bank and the IMF on the Transfer of Real Resources to Developing Countries (Development Committee), Washington, DC, April 2008.

<sup>17</sup> R. Clarke and J. King: *The atlas of water* (London, Earthscan, 2004).

<sup>18</sup> W. Easterling, et al.: “Food, fibre and forest products” in *Climate Change 2007: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Cambridge, Cambridge University Press, 2007), pp. 275 and 300.

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Based on previous experiences (for example, in the 1970s), it would be expected that supply-side responses will take place, thus driving prices down. However, while demand is expected to continue to rise (the World Bank estimates that demand for food will rise by 50 per cent by 2030 as a result of rising affluence and growing world population), supply responses are likely to be relatively inelastic, taking several years to materialize. New sources of demand (for example, biofuels) and “scarcity trends” related to climate change, the cost of energy inputs and the shortage of land and water, imply that the response time is likely to be longer than in previous times of rising food prices.

Furthermore, if supply fails to keep pace with rising demand, then equity issues are likely to become increasingly prevalent at both the national and global levels. The effect of a burgeoning global middle class switching to diets with more meat and dairy products and demanding biofuels for their transport needs – both of which are relatively inefficient in terms of grain use – has major equity implications because it is likely to reduce the affordability of staple foods for poorer people.

## **2. Impact of the food crisis on the poor**

Although everyone consumes food and is affected by a rise in food prices, it is the poor who are more severely hit, not only because their incomes are low, but also because they typically devote higher proportions of their incomes to food.<sup>19</sup> However, in the context of food prices, it is important to recognize that different groups of poor people will experience the impact of rising food prices differently. Thus, a particular policy measure may not be appropriate for minimizing the adverse effects of price increases on all poor people.

The urban poor are invariably net consumers of food staples and are therefore particularly vulnerable to rising food prices. Likewise, in rural areas, a large number of small and marginal farmers typically live below the poverty line and engage in survival-oriented income-generation activities both on and off farm. Of particular concern are landless poor people in rural areas. Most poor people are rural and most rural poor people are net food buyers who are unlikely to be compensated fully by additional employment or by higher wages.

For many countries, especially those where progress in reducing poverty has been slow, the negative poverty impact of rising food prices risks undermining the poverty reduction gains of recent years.

<sup>19</sup> In Bangladesh, for example, the lowest 40 per cent of households spend approximately 65 per cent of their total consumption expenditure on food, including about 50 per cent on cereals. The corresponding figures for the highest 10 per cent are approximately 40 and 30 per cent respectively. These data are from the Bangladesh Bureau of Statistics: *Report of the Survey of Household Income and Expenditure Survey 2005*, Dhaka, 2007.

### Food crisis and the poor: The case of Bangladesh

In the garment industry of **Bangladesh**, the minimum wage for workers at the lowest end of the range (usually women) was fixed in 2006 at 1,662.50 taka (tk) per month (the appropriate exchange rate is: US \$1 = tk69). With a few hours of overtime work – assuming that workers receive payment for such work – typical workers at the lowest level could take home approximately tk2,000 per month. If converted at the rice price of 2006 or early 2007 (i.e. tk20 per kg), that income would be equal to 100 kg of rice. At the current price of tk35 per kg, that income would give the workers a little over 57 kg of rice – a **decline in real terms (or in terms of rice) of 43 per cent**. Even assuming that workers could get access to government-subsidized rice at the price of tk25 per kg (available only at designated centres), their monthly income would now be 80 kg – thus representing a **decline of 20 per cent in real terms**. How do workers cope with such a situation? A family at that level of income typically spends about 50 per cent of its income on basic food (in other words, cereals such as rice and wheat). This implies that, at 2006 prices, it would buy 50 kg per month. In order to buy the same amount of food at the current subsidized price, the family would have to spend tk1,400 per month. It would thus be left with only tk600, or 60 per cent of the earlier amount, for meeting other expenditures. This almost certainly means cutting down in other areas such as clothing, health care or children's education.

For a landless agricultural worker in Bangladesh, there is no stipulated minimum wage except for an outdated reference to an amount of 3.5 kg of rice per day. In early 2007, at the prevailing wage of tk100 per day, a worker could actually buy 5 kg of rice. At tk35 per kg, the same wage now gives the worker only 2.86 kg – a **decline of 43 per cent**. The Government has announced an employment programme in which work will be available at a daily wage of tk150. But even that would buy 4.28 kg of rice – thus leaving a **shortfall of about 15 per cent in real terms**.

## 3. Policy responses to the food crisis and implications for decent work in rural areas

### 3.1. Policy responses

Countries have responded to the food crisis in different ways. The responses include: (i) introducing price controls; (ii) adjusting import duties and other taxes on food grains; (iii) placing restrictions on exports (for example, through levies, quotas and outright bans); (iv) selling food grains at subsidized prices; (v) rationing; (vi) cash transfers to the poor; and (vii) employment programmes.

Fundamentally, governments (as well as donors and international organizations) need to improve the integration of issues relating to the scarcity of water, land and energy into their governance and economic analysis activities. Within the specific context of food, an essential element of this would be to build a much more comprehensive picture of the overall resource footprint and of the sustainability of the production and consumption of different foods (and the use of cropland more generally).

While price controls (sometimes through the manipulation of import duties or taxes) and the sale of food grains at subsidized prices have been tried in a number of countries, the success of these policies has been limited, typically because they may send the wrong signals not only to farmers but also to importers and traders, thus potentially disrupting food supply chains.

Employment programmes constitute a potentially effective means of transferring money to the poor in order to ensure their food security and of simultaneously making investment in agriculture, which is important as a long-term measure for raising food production within individual countries.

Given the magnitude of the crisis and its wider and longer term implications, actions are needed with a short- as well as a medium- to long-term perspective. Likewise, in addition to action by national and subnational governments, action is also needed at the international level, as many policy responses transcend national boundaries.



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### 3.2. Action at the national and subnational levels

In the short term, the priority is to protect the already precarious livelihoods of the poor and the vulnerable and prevent any further widening of the decent work deficits that existed before the crisis. Policy responses will obviously have budgetary implications and governments will need to develop appropriate revenue-generating strategies. Policy responses should be based on an integrated approach. In particular, they should:

- **Establish or expand employment creation programmes** to maintain the purchasing power of the poor and the vulnerable. If carefully designed and if appropriate wage rates are applied, such programmes could help in preventing a widening of decent work deficits. Applying a wage rate that is adequate to protect the pre-crisis purchasing power of the poor should help create a floor below which the market may not go. It may also contribute to the longer term objective of supporting the supply response of farmers through the creation and improvement of necessary infrastructure, such as irrigation systems, rural roads and financial services. However, it should be noted that the efficient implementation of such programmes requires strong institutional frameworks, which are not easy to create at short notice in countries that have no experience of implementing such programmes.
- **Provide social safety nets** for the most vulnerable, which could involve distributing food to the public in the form of aid or at subsidized rates, cash transfers or other targeted programmes for making food or cash available to the poor. However, as with employment creation programmes, not all countries have the necessary capacity to design and implement such safety nets and social protection programmes and consideration must be given to the potential inflationary impact of some social protection measures, to the identification of the best combination of cash and in-kind transfers, to what type of targeting and conditionality works best and so forth.
- **Support increased investment in agriculture** and rural areas so that improvements in productivity (as a result of increasing the amount of land under cultivation and of using new and improved agricultural techniques and technologies) will lead to increased food supply to meet the huge rise in anticipated demand. In this context, specific attention needs to be given to small and marginal farmers so that they are not excluded from the possible benefits arising from the supply response to the current crisis.<sup>20</sup> Such farmers typically use their labour more intensively and measures to raise productivity in such farms would simultaneously contribute to the objectives of augmenting the production of food grains and raising the productivity of labour. Producers' cooperatives and associations could play a useful role in efforts to reach out to and provide services and support to small farmers.
- **Promote off-farm employment, typically in small enterprises and sometimes as part of territorial approaches.** Although agriculture plays a pivotal role in the growth and structural transformation of economies, it needs to be complemented with the promotion of off-farm employment and income-generation activities so that rural economies become more diversified and dynamic. In short, economic diversification is an important dimension to enhancing security, reducing dependence and vulnerabilities and stimulating growth. This calls for fostering an enabling

<sup>20</sup> Indeed, small farmers can provide the much needed boost to a country's food grain production as is demonstrated by the experience of Malawi. A \$60 million programme providing subsidies to small farmers (making cheap seeds and fertilizers available to them) helped the country overcome a disastrous harvest in 2005 to become a country with food surplus in 2006. See interview with J. Sachs in *The Financial Times* (London), 19–20 Apr. 2008.

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environment for sustainable rural and urban enterprise development, which includes more and better access to rural finance for the poor and improved property rights.

- **Promote social dialogue as a means to achieve appropriate adjustments in money wages to reflect the increases in food prices.** While official minimum wages may take a long time to be adjusted and their implementation remains limited at best (especially in rural areas), this is the time for voluntary action on the part of employers to bring about necessary adjustments in wages, without jeopardizing the profitability of the activities and enterprises which are the very sources of employment.
- **Include transparent and effective communication strategies.** It is important to recognize that government policy choices are likely to be better accepted and understood by people if accompanied by information on the causes of high food prices and accompanying policy measures. Obviously, this is not just a rural issue – it is a national issue – and it requires better governance and a fundamental role for the social partners.

### 3.3. Action at the international level

Action at the international level should, in the short to medium term:

- **Ensure an adequate flow of food grains** (either through the market by voucher programmes, for example, or through food aid), especially to countries in difficult situations. In the longer term, donors may need to consider shifting humanitarian aid to a proactive insurance model.
- **Provide budgetary support** to help governments implement employment programmes, provide cash transfers or other poverty-targeted support programmes.
- **Provide compensatory financing** to address balance of payments needs resulting from higher food and energy prices (given that such price rises are driven substantially by longer term structural factors, the conditionality and concessionality attached to such support will need to be examined carefully).

In the medium to long term, it should:

- **Increase donor support** for investment in agriculture and rural areas, especially with regard to small-scale farmers.
- **Establish an international policy**, underpinned by appropriate national policies and with food security as the central issue, on the use of scarce cropland for biofuel production.
- **Promote trade policy reform** to reduce high levels of trade tariffs and subsidies which distort markets and the comparative advantage of countries but maintaining appropriate regulatory frameworks to stabilize production, supply chains and prices.

Policy responses would have to adopt an integrated approach combining action at the national and international levels and short- and long-term measures. In this regard, the decision taken by the Secretary-General of the United Nations, Mr Ban Ki-moon, to establish a top-level task force to address global food shortages and price rises and the current attention devoted to these issues under the Japanese Presidency of the G8 augur well for the development of appropriate solutions to the current food security challenges.