



Food security in the Least Developed Countries

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Objective

This paper seeks to explore the factors affecting food insecurity in Least Developed Countries (LDCs) and consider future policy directions to address hunger and under-nutrition.

1. Food insecurity and global targets – an overview

Progress towards meeting Millennium Development Goals (MDGs) and Brussels Programme of Action (BPoA) targets for reducing hunger and malnutrition remains painfully slow. Global figures show that hunger increased between 2006 and 2009, decreasing slightly in 2010, but still remaining higher than before the global food crisis, both in absolute terms (numbers of food insecure people) and in percentage population terms (FAO, 2010a).

Over 40 % of the world's undernourished people live in China and India alone, so the region with most undernourished people continues to be Asia and the Pacific. However, the proportion of undernourished people remains highest in sub-Saharan Africa, at 30 % in 2010 (FAO, 2010b). 16% of the population of developing countries is undernourished, way above the target for MDG1 of 10% by 2015. But for LDCs, the figures are much worse. About 34 % of the LDC population is reported to have been undernourished in 2005–2007 (UNCTAD 2010). In 2007, 53 % of the population of LDCs was living in extreme poverty, on less than \$1.25 a day, and 78 % was living on less than \$2 a day. The incidence of extreme poverty was significantly higher in African LDCs, at 59 %, than in Asian LDCs, at 41 % (UNCTAD 2010).

The BPoA set goals for reducing hunger and poverty in LDCs, based on MDG targets. But these targets give an incomplete picture of the levels of hunger in LDCs. For instance, of LDCs for which information is available, 12 are considered to be on track to meet MDG1 by 2015; 11 have not made enough progress to meet MDG1; and the position in eight countries has deteriorated. Only two have already met it. However, of those countries considered to be on track, the Global Hunger Index (GHI) indicates that levels of hunger and under-nutrition are 'alarming' in eight, and 'extremely alarming' in one (IFPRI, 2010). Even though Ethiopia is considered to be on track to meet MDG1, 41% of the population is undernourished (FAOSTAT, 2010).

The GHI measures and tracks levels of hunger, using three equally weighted indicators. Hunger levels in individual countries are identified as 'low', 'moderate', 'serious', 'alarming' or 'extremely alarming'. Of the LDCs for which information is available, four have a ranking of 'extremely alarming', 23 are ranked 'alarming' and 11 are ranked 'serious'. No LDC falls into a better ranking. Of the 30 countries with the worst rating, 27 are LDCs.

The GHI makes clear that countries with higher gross national income have a lower GHI and vice versa. But conflict, inequality, poor governance and gender discrimination can alter the correlation. For instance, in South Asia, the low nutritional, education and social status of women contributes to levels of poor nutrition in under-5s. In Sub-Saharan Africa, low government effectiveness, conflict, political instability and HIV AIDS are major factors affecting levels of hunger. Conversely, countries with greater gender equity and pro-poor economic growth have lower levels of hunger than expected for the rate of economic growth (IFPRI, 2009, 2010). It is therefore clear that progress on MDG 2 (relating to education) and MDG 3 (gender equity) is vital for improving food security.

It is also clear that policies to address food security must be targeted at rural populations. Three quarters of the world's poor live in rural areas and the majority of hungry people are food producers. These include small-scale farmers, fishers, herders and agricultural workers. In all cases, lack of food security is linked to social exclusion, and worsened by inequity and lack of access to and control over economic resources.

The aggregate figures above mask huge disparities between different countries and within countries. Country level data hides differences between regions, social or ethnic groups and intra-household differences though it is well documented that marginalised ethnic groups, women and children are more likely to be food insecure.

It is beyond the scope of this paper to identify specific areas of food insecurity in individual LDCs, but it is possible to make some general comments about what factors are relevant.

The FAO State of Food Insecurity report 2010 identifies 22 countries as in 'protracted crisis' – either natural or human-induced. Of these, 16 are LDCs. Levels of food insecurity are significantly higher in those countries than in LDCs as a whole (FAO, 2010a). Food insecurity is particularly high in countries in conflict, and those emerging from conflict. For instance, 69% of the population in the Democratic Republic of Congo is reported to be undernourished.

Countries that are particularly vulnerable to extreme weather events, net food-importing countries, and those reliant on a small number of primary export commodities are all more food insecure at the national level. These factors are explored in more detail below.

2. LDCs in the global market

Between 2002 and 2007, many LDCs experienced economic growth, and increased GDPs, as part of the global economic boom. But there was a weak link between increased GDP and

poverty reduction. This was in part because trade liberalisation in the 1990s led to greater commodity dependence – for example, fuels and minerals accounted for 67% of LDC exports in 2007 (UNCTAD 2010). But many of the countries which export minerals, import food – in fact, all LDCs are net food importing (Ng and Aksoy, 2008). This meant that, as LDC economies grew, so did the food import bill, from over \$9 billion in 2002 to \$24 billion in 2008 (UNCTAD 2010). Growth was therefore based on external factors, rather than increasing domestic productive capacities. This meant that high growth in some countries, greater financial flows and greater engagement in international trade did not translate into local jobs, infrastructure development, or poverty reduction. Instead of pro-poor development, building strong rural-urban linkages, and stimulating demand for local food and agricultural raw materials, export-led growth has focused on capital-intensive industries such as mineral extraction. This has decreased economic diversification, and left countries vulnerable to external market shocks with little economic autonomy.

When global commodity prices slumped as a result of the global financial crisis, oil and mineral exporting countries were particularly badly hit, as were those dependent on tourism. Those reliant on agricultural exports suffered less badly, and, significantly, those trading mainly with other developing countries were least affected.

But even if, at the national level, agricultural products are traded, can this help small scale farmers? Olivier de Schutter, UN Special Rapporteur on the Right to Food has noted that most trade takes place between (and within) transnational corporations, rather than nation states (CSD-17, 2009). In order to have a positive impact on food security, agri-food supply chains need to be more inclusive and transparent, to allow smallholders to benefit. Small-scale farmers need support to engage in markets. For instance, supporting farmers' organisations enables them to negotiate fairer prices. Small scale farmers need access to information on prices, premiums and quality, and need improved access to credit (IIED, 2011). But markets and global food chains do not reach the poorest, and farmers outside the markets will not be affected by food industry policy (Vorley, 2010). More important than helping small-scale farmers to benefit from global markets is the creation of local markets linking rural and urban areas to support local 'value chains' and boost domestic economic growth.

3. The impact of the financial crisis

Food prices are rising again, affected by unrest in the Middle East and oil price rises (Inman, 2011). But high food prices do not benefit small-scale and subsistence farmers, as around 50% of them are net food buyers. Generally, the poorest, land-less and women headed households are most affected by price rises (FAO, 2008). This is because changes in global prices do not

“offset smallholders’ entrenched political and economic marginalisation.” Instead, “asymmetries in information and bargaining power mean that volatility has a regressive effect, increasing inequalities... in the food sector” (FEC, 2010).

There is evidence that speculation on commodity markets played some part in the 2007/8 food price rises, though it is difficult to quantify the effect. While initially the 2007 price rises were caused by increased oil prices and harvest failure in Australia and Russia, this was exacerbated by the actions of speculative traders. Financial practices increased the volatility that exists in the agriculture sector, magnifying risks so that an “... unstable global monetary system intensified commodity price volatility to the detriment of food security” (Oram, 2010).

Financial systems underwrite trade in commodities and the lack of transparency in financial markets makes it difficult to see how the WTO Doha round promise of free markets and fair trade can ever be realised. It is vital for food security that global trade regimes recognise that food is not just another commodity, and enable governments to insulate domestic food markets from international price volatility.

There is a strong link between food security and financial regulation – on the one hand, use of tax havens by multi-national food companies has removed around US\$160 billion from poorer countries’ tax revenues; while at the other end of the spectrum, poor farmers cannot get access to credit, which is a vital first step in protecting livelihoods.

One solution could be to establish a financial transaction tax on commodity transactions (the so-called Tobin Tax) which dampens incentives for speculative behaviour. Other responses could include re-establishing global food reserves, which were at historically low levels in 2007 (Sutton and MacMillan, undated). At a community level, small local grain reserves can protect farmers from price volatility.

4. Land grabs

Another impact of the global financial crisis has been an increase in interest by global investors in buying land, which is considered to be safer than other investments, and likely to give more reliable returns. Interest in acquiring land for agricultural investment also comes from food-importing countries, keen to ‘out-source’ their food production. The FAO estimates that, in the last three years, 20 million hectares have been acquired by foreign interests in Africa (Graham et al, 2011). While private sector deals account for 90% of land investments so far, governments play a role in supporting these deals, either directly or through supportive policy environments.

Major current investors are the Gulf States, China and South Korea, but there is European involvement too (Alpert, 2011). For instance, the EU is the second largest investor in Ethiopia, focusing on meat, agrofuels and horticulture. More broadly, European policies such as those increasing demand for bio-fuels makes large scale land acquisitions more financially attractive.

There is growing concern that these international land based investments will have negative impacts in terms of political stability, social cohesion, human rights, local food security and tenure rights for the receiving country.

Although there is broad consensus that pro-poor growth is best achieved through supporting smallholder productivity, many countries continue to base their agricultural growth policies on improving production through large-scale plantation-style developments, converting subsistence farming to commercial farming. Foreign investment in land is therefore part of this strategy in many countries, such as Rwanda and Ethiopia. But such investment produces fewer jobs and lower wages than small scale farming (Alpert, 2011). Commercial agriculture also often affects biodiversity, and reduces access to water for local communities.

Land acquisition is primarily profit oriented and agricultural products are usually for export. Investment treaties often give investors guarantees of low labour and operating costs, and the right to repatriate production and profits (Malik 2011), thus also avoiding paying tax in the host country. This limits the development benefits of such deals. But even if regulation were introduced to enable host countries to manage the investment to contribute to rural development, large-scale land acquisitions undermine equitable access to productive resources for the local population. It is vital that there is a balance of rights and obligations between local communities and foreign investors, but there is scant evidence that this is happening. Instead, there is evidence of evictions, loss of livelihood and loss of assets (Graham et al, 2011).

Access to, and rights over, land in Africa are usually based on traditional and customary rights, not legal documents, or land is state owned without clearly defined access rights. This makes it difficult for local communities to claim rights to land which the state wants to lease to investors. This is particularly true for land used by pastoralists. For instance, the Ethiopian government estimates that there are 14-18 million hectares of land used for agriculture, while FAO evaluated it at 35 million hectares in 2007, the difference being meadow and pasture land which the government does not consider to be in use for agricultural production. However, this land is vital for pastoral farmers, and removing their access to it would dramatically reduce their livelihood security.

Land tenure is also vitally important for women. Where women have access to land, they have greater livelihood security, higher social status, greater control over domestic decision making and access to other resources such as credit (UNIFEM, 2010). Productivity also increases when women have security of tenure, as they are often responsible for household level agricultural production. In sub-Saharan Africa, women's access to land is the lowest of all continents and in many LDCs, women's land holdings are a fraction of those of men.

It is clear that land grabbing undermines access to and control of resources by local populations now and into the future and is likely to be a barrier to improving access to food and securing livelihoods for local populations. Small-scale and subsistence farmers need traditional land rights to be recognised, security of tenure to be granted and protection from eviction guaranteed.

5. Adaptation and mitigation

Farmers around the world are faced with increasing uncertainty over agricultural production because of climate change. For subsistence farmers already struggling to ensure food and livelihood security, climate change is adding a further element of risk and volatility. It is apparent that climate change will lead to:

- An increase in the number and intensity of extreme weather events. There has already been a four-fold increase in natural disasters between 1975 and 2005. Fragile areas are at a disproportionately higher risk (Mactaggart, 2010)
- Volatility and uncertainty in weather patterns
- Uncertain and changing rainfall distribution patterns
- Changing coastal ocean temperatures, affecting fishing
- Desertification and additional pressures on resources such as water and grazing land
- Increased urbanisation as people abandon marginal farm-lands

All this uncertainty will lead to harvest unpredictability, price volatility and increasing vulnerability for poor food buying families (IATP, 2011). Climate change is likely to be a risk accelerator, exacerbating existing risks and putting additional pressure on those with least capacity to cope with shocks.

Previous attempts to increase food security have focused on using 'Green Revolution' technology to boost production, but there is growing awareness of the environmental consequences of this approach. This technology was based on an assumption of cheap oil and plentiful water. But now oil, water and land are all running out. Although food production has

doubled over the last 40 years, inputs have more than doubled. But increasing oil prices will make high-external-input agriculture prohibitively expensive, and alternative approaches to improving productivity, such as organic and agro-ecological approaches, will have to be considered. This will also help the agriculture sector reduce greenhouse gas emissions related to food production.

There is now a growing understanding of the link between agricultural production and ecosystem protection, including biodiversity protection. Not only does the agriculture sector have to respond to the impacts of climate change, but agricultural practice must develop to limit its impact on the climate and on the environment. There is a clear need to link ecological sustainability to economic development, ensuring that agricultural systems take into account the importance of water security, soil protection and biodiversity.

Despite the clear link between food security, climate change mitigation and environmental protection, no work programme on agriculture was agreed at Cancun, leaving a policy hole on issues such as the impact of climate change mitigation policies on future choices for agricultural development (Godfray et al, 2011).

However, there is agreement that explicit pro-poor climate change policies are needed at all levels. These must focus on environmental sustainability and community level resilience

The rural poor need help in producing more – and more nutritious – food for their families, while using fewer resources and increasing their ability to cope with climate shocks. This points to increasing investment to boost local production, using local traditional knowledge and skills to identify natural pesticides and fertilisers. There is a need to stop extractive farming practices to halt soil erosion, soil degradation and water resource depletion, and to enhance risk resilience at community level (Godfray et al). Increasing yields sustainably requires building on existing knowledge and techniques, incentivising and spreading best practice through revitalised extension services.

Climate resilience is about tackling underlying vulnerabilities, using social protection mechanisms and disaster risk reduction strategies to reduce risk to livelihoods (IDS, 2009). There is evidence that the most effective way to help communities adapt to climate change is through local institutions that have established and sustainable mechanisms for responding to climate shocks. But currently, local institutions are poorly integrated into the process and traditional adaptation strategies are neglected (Virtanen et al, 2011).

6. Strategies for enhancing food and nutrition security

a) Investment

In the last few years there has been a plethora of initiatives to develop a global approach to food security. These include the UN's High-Level Task Force on the Global Food Security Crisis (established in 2008); the Committee on World Food Security (reformed in 2009); the L'Aquila Food Security Initiative (2009); and the Global Agriculture and Food Security Programme (2010). There are also several regional initiatives (Farming First, 2010). These initiatives all highlight the need to reverse the decline in investment in agriculture over the last 20 years.

Across all LDCs, agriculture accounts for 26% of GDP (2006 – 2008), and employs 2/3 of the population. Yet it receives only around 3% of international development aid (FAO, 2010a). Aid for African agriculture declined 43% between 1992 and 2002, and investment in agriculture lagged far behind investment in export commodities (UNCTAD, 2010).

Given that there is broad agreement that growth in agriculture generates the greatest benefits for the poorest people, this lack of investment in the agriculture sector can be correlated with the lack of progress in reducing poverty. Any strategy for enhancing food security must focus on improving small-scale and subsistence agricultural production. This implies improved extension services and agricultural research directed at improving yields without increasing inputs (Foresight, 2011). Extension work must include training women as extension workers. Women are key to improving farm-level productivity, and it has been demonstrated that women extension workers reach twice the number of women farmers than male extension workers (UNIFEM, 2010). It is estimated that investment in extension services and reaching women farmers could at least double yields (Foresight, 2011).

b) Managing risk

Pro-poor investment in the agriculture sector must focus on helping poor people reduce and manage household risk, to both climate and financial shocks. There is a wide range of policy options to do this, including:

- social protection programmes
- land registration programmes to secure land tenure
- access to better market information
- investment in infrastructure and utilities, rural services, communications
- good governance
- strengthening individual and collective capabilities
- support for agricultural practices that reduce climate risk, such as agro-ecological approaches

- support for agricultural practices that enable diversification
- support for rural livelihoods through minimum price mechanisms for staple crops
- global policy flexibility to enable countries to increase domestic production and dampen the impact of price volatility on their populations (IAASTD, 2009).

c) Combining ecological concerns with food security

There is growing evidence that agro-ecological approaches are more successful at boosting food production in developing countries (De Schutter, 2011a).

This knowledge-intensive approach requires support for small-scale farmers' organisations, which are best able to disseminate good practice among their members. It enables ecological concerns and climate change adaptation approaches to be combined with food security priorities. It enables the diversity of ecosystems to be recognised and supported, as an agro-ecological approach can enable farmers to develop techniques suited to the range of soil types and crop varieties typical to most developing countries. This contrasts with a high-external-input approach which provides a set package of inputs for all farmers.

An agro-ecological approach also recognises the value of natural habitats to mitigate climate change and helps farmers find viable ways to protect them. But research on climate change adaptation is still at an early stage, and so far, most scientific research has focused on the needs of agriculture in developed countries. Funding for solutions appropriate to developing countries must be prioritised and research must be targeted at reaching the poorest (Mactaggart, 2010b).

d) Food sovereignty and the right to food

In order to reach the poorest, there must be the political will to ensure that the social, cultural, environmental and economic aspects of the food system are considered. There must be a fundamental reshaping of the global food system to prioritise the right to food for all (CSD-17, 2009). Reducing hunger is about distributional justice, and creating a fair and environmentally sustainable agricultural system (IAASTD, 2009).

A focus on food sovereignty means promoting autonomy for small-scale farmers over food production, consumption, seeds and markets (IIED, 2011). It means recognising that the inequitable distribution of natural resources such as land and water re-inforce cycles of poverty. It means addressing unequal gender relations which deny women access to property rights and finance, health and education. And it focuses agricultural development on environmental and social justice outcomes and food consumption outcomes.

This approach demands action to reduce the political and economic marginalisation of small-scale and subsistence farmers, including ensuring value for producers, building localised food systems, building local control, and respecting local skills and knowledge.

e) Policy frameworks

Public policy can play a crucial role in protecting national food security and creating an enabling environment for agricultural development. This can include policies:

- to strengthen the small-holder sector, such as better access to credit and better extension services
- which reduce household risk such as better health facilities and education services
- which support rural development such as investment in rural infrastructure, communication and access to markets
- which support co-ordination between sectoral development plans, linking agriculture, energy, water and infrastructure policy
- which strengthen rural organisations and enhance individual and organisational capacity

(IFAD, 2010)

At the global level, policies should focus on:

- reducing the impact of volatile financial markets on the economies of LDCs, for instance by establishing global and local food reserves
- limiting financial speculation on agricultural commodities
- stopping dumping of agricultural products
- strengthening the benefits to small farmers of participating in global supply chains
- protecting the rights and livelihoods of farmers and agricultural workers employed in the global food system
- protecting access to land and other natural resources by local communities
- ensuring agricultural research is targeted to the needs of the poorest
- strengthening social protection strategies
- investing in climate change adaptation and mitigation

(De Schutter, 2011, IFPRI, undated)

The challenges facing the global food system are immense, but the biggest challenge remains that of eradicating hunger. The food system must become more rights-based and less market-based; more people-centred and designed to take into account the perspectives of the poorest people themselves.

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