

Food security and nutrition: the drivers of change

In 2000, world leaders met and adopted the United Nations Millennium Declaration. Later, eight Millennium Development Goals (MDGs) were set out, including the first one on halving hunger and extreme poverty rates, reflecting the world's commitment to improving the lives of billions of people.

Half a year remains before the end of 2015, the deadline for achieving most of the MDG targets, including the hunger target, MDG 1c, traditionally measured using the prevalence of undernourishment (PoU) indicator. As this report shows, since 1990–92, over 216 million people have been rescued from a life of hunger – to date, 72 countries have already reached the MDG 1c hunger target, with another nine just short by a small margin. Of these, 12 developing countries already had undernourishment rates below 5 percent in 1990–92. Meanwhile, twenty-nine countries have accomplished the more ambitious 1996 World Food Summit (WFS) goal of halving the number of chronically underfed people (Tables 2 and 3, pp. 12–13).

Progress towards food security and nutrition targets requires that food is available, accessible and of sufficient quantity and quality to ensure good nutritional outcomes. Proper nutrition contributes to human development; it helps people realize their full potential and take advantage of opportunities offered by the development process. As past editions of this report (2010, 2012 and 2014) have shown, good governance, political stability and the rule of law, and the absence of conflict and civil strife, weather-related shocks or excessive food price volatility, are conducive to all dimensions of food security.

This section looks at a range of factors that enable progress towards food security and nutrition goals. The list of factors – economic growth, agricultural productivity growth, markets (including international trade) and social protection – is by no means exhaustive. The section also shows how being in a protracted crisis has deleterious effects on progress in hunger reduction. Preliminary quantitative analysis, using data from the period 1992–2013, has helped identify these drivers of change and their relative importance in shaping progress against hunger.²⁴

Economic growth is central to the fight against hunger – countries that become richer are less susceptible to food insecurity. Policy-makers in rapidly growing economies have

increased capacity and resources to dedicate to improving food security and nutrition. But this is not always the case. Economic growth, while a necessary condition for progress in poverty and hunger reduction, especially in the face of an expanding population, is not sufficient. It is *inclusive* growth that matters – growth that promotes equitable access to food, assets and resources, particularly for poor people and women, so that individuals can develop their potential.²⁵

Across the developing world, the majority of the poor and most of the hungry live in rural areas, where family farming and smallholder agriculture is a prevailing – albeit not universal – mode of farm organization. Although the ability of family farming and smallholder agriculture to spur growth through productivity increases varies considerably, its role in reducing poverty and hunger is key. Growth in family farming and smallholder agriculture, through labour and land productivity increases, has significant positive effects on the livelihoods of the poor through increases in food availability and incomes.

The linkages between food security and international trade are complex and context-specific. Policies that affect exports and imports of food contribute to determining relative prices, wages and incomes in the domestic market, and hence shape the ability of poor people to access food. Trade, in itself, is neither a threat nor a panacea when it comes to food security. The opportunities and risks to food security associated with trade openness should be carefully assessed and addressed through an expanded set of policy instruments.

Social protection systems have become an important tool in the fight against hunger. More than one hundred countries implement conditional or unconditional cash transfer programmes that focus on promoting food security and nutrition, health and education, particularly for children. Food distribution schemes and employment guarantee programmes are also important. The expansion of social protection across the developing world has been critical for progress towards the MDG 1c hunger target. Providing regular and predictable cash transfers to poor households often plays a critical role in terms of filling immediate food gaps, but can also help improve the lives and livelihoods of the poor by alleviating constraints to their productive capacity. Combining social protection with complementary agricultural development



measures, such as the Purchase from Africans for Africa programme, which links family farmers and smallholders to school-feeding programmes, can maximize the poverty-reducing impact of these programmes.

In 1990, only 12 countries in Africa were facing food crises, of which only four were in protracted crises.²⁶ Just 20 years later, a total of 24 countries were experiencing food crises, with 19 in crisis for eight or more of the previous ten

years. Food insecurity can be both a cause and effect of protracted crises and can be instrumental in triggering or deepening conflict and civil strife – it increasingly lies at the root of protracted crisis situations. The impact of conflict on food security can be more dramatic than the direct impact of war, and mortality caused by conflict through food insecurity, and famine can far exceed deaths directly caused by violence.²⁷

Economic growth and progress towards food security and nutrition targets

Economic growth is necessary for alleviating poverty and reducing hunger and malnutrition; it is critical for sustainably increasing employment and incomes, especially in low-income countries. Since the beginning of the 1990s and up to 2013 (most of the MDG monitoring period) global output per capita has increased by 1.3 percent per year, on average. The economies of low- and middle-income countries – including all developing countries – grew more rapidly, by 3.4 percent per year. Nevertheless, these numbers mask considerable variation in economic growth performance across regions and countries.

The relationship between economic growth and hunger is complex. Economic growth increases household incomes, through higher wages, increased employment opportunities, or both, due to stronger demand for labour. In a growing economy, more household members are able to find work and earn incomes. This is essential for improving food security and nutrition and contributes to a virtuous circle as better nutrition strengthens human capacities and productivity, thus leading to better economic performance. However, the question here is whether or not those people who are living in extreme poverty and are most affected by hunger will be given the opportunity to participate in the benefits of growth and, if they are, whether they will be able to take advantage of it.

On average, and across the developing world since 1990–92, economic growth has brought strong and persistent hunger reduction. This is evident when GDP growth per capita is plotted against the PoU (Figure 15, p. 28). Increases in the incomes of the poor are associated with higher intake of dietary energy and other nutrients. But in the longer term, as economies grow and countries become richer, this relationship weakens – increases in GDP growth may bring relatively fewer people out of hunger (in Figure 15, the line reflecting the relationship between economic growth and the PoU was steeper in 1992 than in 2010). Among the early success stories is Ghana, which has experienced average annual growth rates of over 3 percent, and has witnessed impressive hunger

reduction rates – the PoU in the country fell from 47 percent in 1990–92 to below 5 percent in 2012–14 (Box 1, p. 29).

In several cases, the positive effects of economic growth on food security and nutrition are related to greater participation of women in the labour force. In Brazil, for example, labour force participation of women rose from 45 percent in 1990–94 to 60 percent in 2013. In Costa Rica, the proportion of women workers increased by 23 percent between 2000 and 2008. Spending by women typically involves more household investments in food and nutrition, but also in health, sanitation and education, compared with the case when resources are controlled by men.²⁸

But not all countries that experienced strong economic growth performed well in terms of hunger reduction. Some countries progressed well towards the international hunger targets, while others experienced setbacks. In general, there has been uneven progress in translating economic growth into improvements in food security.

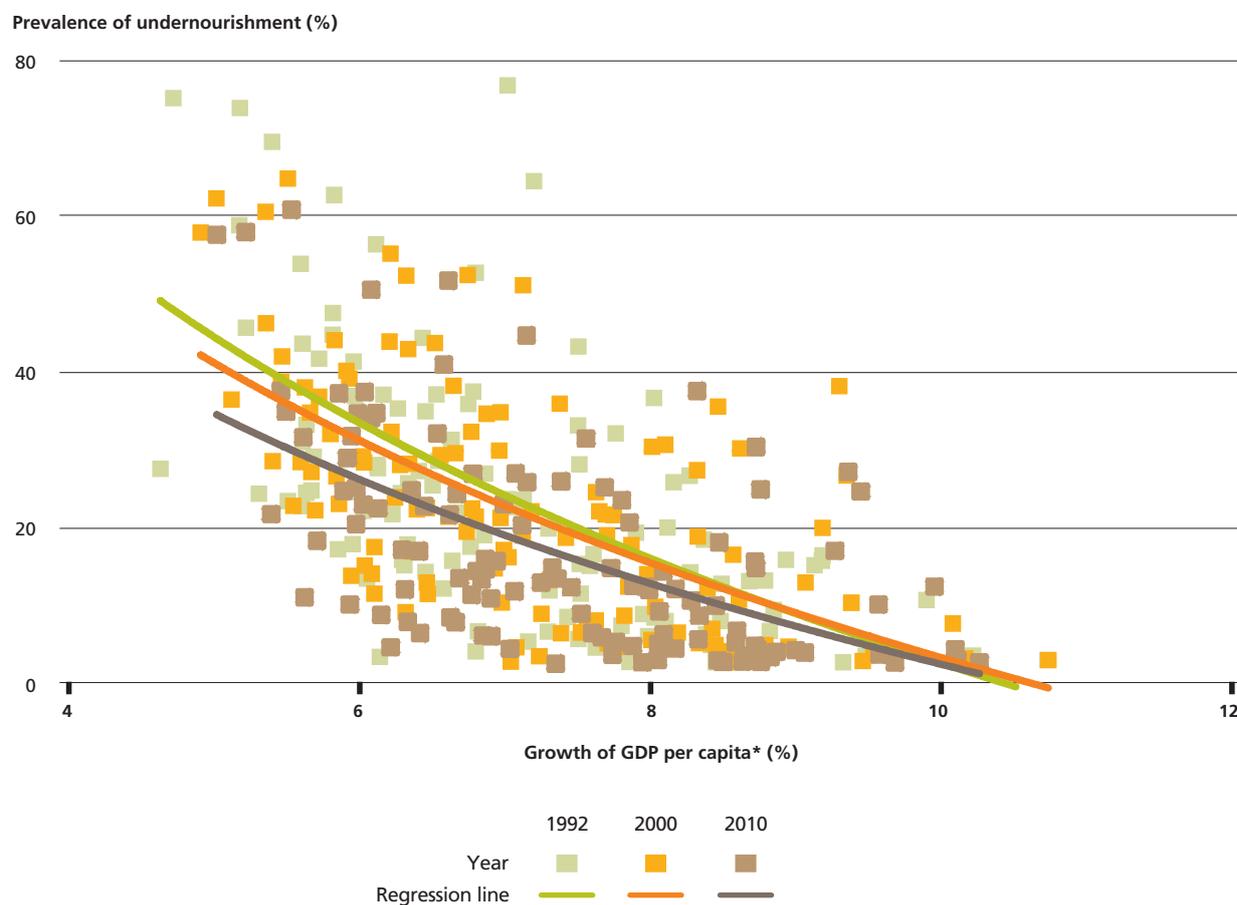
■ Inclusive economic growth and poverty reduction

On the whole, progress in alleviating poverty has been faster than in fighting hunger. This is because the hungry are the poorest of the poor; they have limited or no access to physical and financial assets, little or no education, and often suffer from ill health. Poor agricultural households lack access to sufficient, high-quality land and other natural resources or to remunerative sources of income (self-employment, wage labour). At the same time, hunger creates a trap from which people cannot easily escape. Hunger and undernutrition mean less-productive individuals, who are more prone to disease and thus often unable to earn more and improve their livelihoods. This, in turn, hinders progress in alleviating extreme poverty and fighting hunger – particularly as labour is the principal asset held by the poor.



FIGURE 15

Economic growth and prevalence of undernourishment, 1992, 2000 and 2010



*Expressed in constant 2005 US dollars.
Source: FAO and World Bank.

Not all types of growth are effective in reducing hunger and malnutrition. Very poor people cannot participate in growth processes that require capital or generate employment for the educated and skilled. For example, economic growth generated by capital-intensive exploitation of resources, such as minerals and oil, is likely to have very few or weak direct linkages to the poor. The greater the inequality in the distribution of assets, such as land, water, capital, education and health, the more difficult it is for the poor to improve their situation and the slower the progress in reducing undernourishment.²⁹

Inclusive economic growth improves the incomes of the poor. If these incomes grow more rapidly than the growth rate of the economy, income distribution also improves. What matters for effectively improving food security is for economic growth to reach those in extreme poverty – the bottom quintile of the income distribution. Approximately three-quarters of the world's poor live in rural areas, with the share even higher in low-income countries.³⁰ In most developing regions, the risk of working poverty (workers who live on less than US\$1.25 a day)

is highest for employment in agriculture – about eight out of ten working poor are engaged in vulnerable employment in the informal economy, particularly in agriculture.³¹

Agriculture on its own can trigger growth in countries with a high share of agriculture in GDP. But even if other sectors of the economy, such as mining or services, were to grow, agriculture, through targeted investments, can become an avenue through which the poor participate in the growth process. Empirical evidence suggests that agricultural growth in low-income countries is three times more effective in reducing extreme poverty compared with growth in other sectors. In sub-Saharan Africa, agricultural growth can be 11 times more effective in reducing poverty than growth in non-agricultural sectors.³² Investments and policies that promote increased agricultural labour productivity lead to increases in rural income. Countries that have invested in their agriculture sectors – and especially in improving productivity of smallholders and family farming – have made significant progress towards the MDG 1c hunger target (Boxes 1 and 2).



BOX 1

Ghana: economic growth with improved food security and nutrition

Since 1990–92, Ghana has experienced high per capita economic growth rates averaging 3.3 percent per year. At the same time, the proportion of the population in extreme poverty declined from 51 percent in 1991 to 29 percent in 2005 and valid assessments suggest that the declining trend has continued. The prevalence of undernourishment – the proportion of the population experiencing chronic hunger – declined from 47.3 percent in 1990–92 to below 5 percent in 2012–14.

Agriculture has played a significant part in Ghana’s growth. Together with increases in the production of cocoa, domestic food production increased significantly, promoted by policies, institutional reforms and investments under the 1991–2000 Medium-Term Agricultural Development Programme.¹

But trade liberalization also led to substitution of local production of some staples as well as of manufacturing with imported goods, creating challenges for employment. In addition, uneven development across different population groups and regions, such as in the north of the country, led to increasing income inequality, with the Gini coefficient increasing from 38 to nearly 43 in 2005. This challenge was counterbalanced, to a significant degree, by the establishment of effective safety nets and social protection mechanisms under the country’s Poverty Reduction Strategies and the National

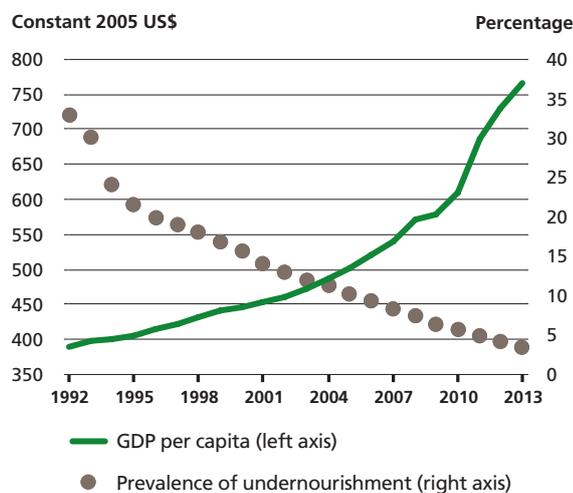
Social Protection Strategy (NSPS). The development of such social protection mechanisms was underpinned by the expansion of the tax base, brought about by rapid economic growth, from 12 to 24 percent in only 15 years, between 1990 and 2004, which doubled government revenues.

The NSPS gives priority to vulnerable women in agriculture with low education and poor credit access, while making efforts to empower other disadvantaged groups. Other programmes, such as Livelihood Empowerment Against Poverty (LEAP), which provides cash transfers to poor people with disabilities, also contributed to poverty reduction. The government, supported by the international development community, is undertaking efforts to strengthen human resources by increasing spending in education, as well as by developing the infrastructure needed to further promote growth.²

¹ S. Asuming-Brempong. 2003. *Policy Module Ghana: economic and agricultural policy reforms and their effects on the role of agriculture in Ghana*. Paper prepared for the Roles of Agriculture International Conference, 20–22 October, Rome. Rome, FAO.

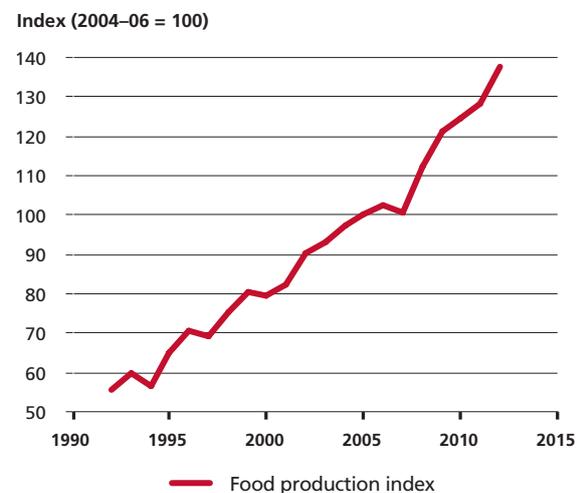
² S.M. Sultan and T. Schrofer. 2008. *Building support to have targeted social protection interventions for the poorest: the case of Ghana*. Paper presented at the Conference on Social Protection for the Poorest in Africa: Learning from Experience, Kampala, Uganda, 8–10 September 2008.

GDP per capita and prevalence of undernourishment, Ghana, 1992–2013



Sources: FAO and World Bank.

Food production index, Ghana, 1992–2012



Sources: FAO and World Bank.



BOX 2

United Republic of Tanzania: economic and agricultural growth without improved food security and nutrition

Since the beginning of the 1990s, the United Republic of Tanzania's average annual GDP growth of 2.3 percent has been mainly driven by the expansion of industry and services. Agriculture has also been expanding, but at a relatively slower pace. Between 1992 and 2013, mean annual growth in agricultural labour productivity – measured by value added per capita – averaged 1.6 percent, while the share of agriculture in GDP declined from nearly 50 percent to 26 percent.

During the same period, the country's prevalence of undernourishment increased from 24.2 percent in 1990–92 to 34.6 percent in 2012–14, and the number of undernourished from 6.4 to 17.0 million people. Only from around 2004, did the prevalence of undernourishment begin to show encouraging signs of reversing its past upward trend. Poverty remains high, although the proportion of the population living in extreme poverty declined from 72 percent to 44 percent between 1992 and 2012.

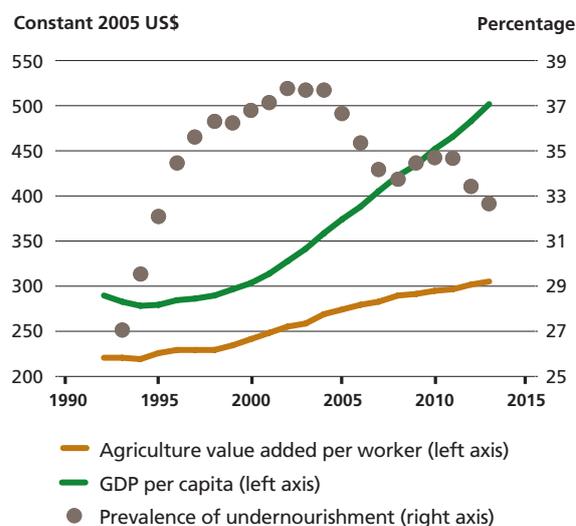
The disconnected paths between growth on the one hand, and poverty and food insecurity on the other, can be largely attributed to trade liberalization policies and privatization efforts, which were not accompanied by effective policies to modernize agriculture and include the

poor and food-insecure in the distribution of earnings from growth during the 1990s. Low investment in agriculture, which is dominated by small family farmers producing for subsistence and having poor access to local and international markets, appears to explain, at least partly, the divergence. In addition, hunger and poor nutrition constrained the productive capacity of the labour force.¹

Even though market reforms have enhanced the role of the private sector in promoting further investments, changes in governance are still needed. The Tanzania Investment Centre, established in 2000, contributed to growth, but needs to be supported by an improved regulatory framework that can provide effective incentives for investments. In addition, the country is still missing the infrastructure needed for broad-based economic development. Secure access to land remains a key constraint, not only for agriculture, but also for domestic and foreign investors.²

Social protection policies have a long history in the United Republic of Tanzania and have been successful in providing income support to multiple or specific groups, and in shielding the poor and vulnerable from the impacts of shocks.³ Nevertheless, the effectiveness of such programmes in contributing towards poverty and hunger reduction is constrained by their limited coverage and targeting exclusion errors. There will be a need to continue to expand social protection mechanisms to help reduce poverty and improve food security and nutrition.

Agricultural productivity, GDP per capita and prevalence of undernourishment, United Republic of Tanzania, 1992–2013



Sources: FAO and World Bank.

¹ United Republic of Tanzania, 2011. Tanzania Agriculture and Food Security Investment Plan (TAFSIP) 2011–12 to 2020–21.

² OECD. 2013. Overview of progress and policy challenges in Tanzania. In *OECD Investment Policy Reviews: Tanzania 2013*, pp. 23–54. Paris, OECD Publishing.

³ F. Leriisse, D. Mmari and M. Baruani. 2003. *Vulnerability and social protection programmes in Tanzania*. Study on Social Protection Programmes on Vulnerability for the Research and Analysis Working Group.



The accommodation of gender considerations is crucial for economic growth in countries with agriculture-dependent economies. Women play important roles as producers, managers of productive resources and income earners, and they are key providers of unpaid care work in rural households and communities. However, despite decades of efforts to address gender inequalities, many rural women continue to face gender-based constraints that limit their capacity to contribute to growth and take advantage of new opportunities arising from the changes shaping national economies. This has serious consequences for well-being – not only for women themselves, but also for their families and societies at large – and it represents one of the main reasons for the economic underperformance of agriculture in poorer countries.³³ While it is sometimes argued that economic growth inevitably leads to gender equality, the empirical evidence is weak and inconsistent. Much seems to depend on policies and strategies aimed at shaping inclusive markets and reducing poverty.³⁴ Agriculture-based solutions need to be complemented by interventions that promote the productive potential of the

rural space. In addition, direct support to rural livelihoods through social protection programmes provides immediate relief to the most vulnerable. Such programmes also have long-term benefits – they enable broad participation of the poor in the growth process through better access to education, health and proper nutrition, all of which expand and strengthen human potential.

Social protection can establish a virtuous circle of progress involving the poor with increased incomes, employment and wages. For example, the Zero Hunger Programme and the *Bolsa Familia* in Brazil were crucial for achieving inclusive growth in the country. *Bolsa Familia* reached almost a quarter of the population, mainly women, transferring above US\$100 every month to each family, as long as they sent their children to school.³⁵ With the Brazilian economy growing at 3 percent per year since 2000, thus providing the necessary public revenues, these programmes have significantly reduced income inequality – between 2000 and 2012, the average incomes of the poorest quintile of the population grew three times as fast as those of the wealthiest 20 percent.³⁶

The contribution of family farming and smallholder agriculture to food security and nutrition

More than 90 percent of the 570 million farms worldwide are managed by an individual or a family, relying predominately on family labour. These farms produce more than 80 percent of the world's food, in terms of value. Globally, 84 percent of family farms are smaller than 2 hectares and manage only 12 percent of all agricultural land. While small farms tend to have higher yields than larger farms, labour productivity is less and most small family farmers are poor and food-insecure.³⁷ The sustainability and future food security of these farms may be threatened by intensive resource use. Public policies that recognize the diversity and complexity of the challenges faced by family farms throughout the value chain are necessary for ensuring food security.

Improved productivity of agricultural resources through sustainable intensification plays a key role in increasing food availability and improving food security and nutrition. At the global level, productivity and food availability have been increasing, contributing significantly to reductions in undernourishment worldwide. Higher agricultural labour productivity is generally associated with lower levels of undernourishment (Figure 16).

Public policies should provide incentives for the adoption of sustainable agricultural intensification practices and techniques – sustainable land management, soil conservation, improved

water management, diversified agricultural systems and agroforestry – in order to produce more outputs from the same area of land while reducing negative environmental impacts. More conventional yield-enhancing technologies, such as improved seed varieties and mineral fertilizers, are also valuable options, especially when combined with greater attention to using these inputs efficiently.

With increased productivity, farmers grow more food, become more competitive and receive higher incomes. Productivity growth in small family farms contributes to more inclusive growth, not only by reducing the prices of staple foods but also by improving access to food. With well-functioning rural labour markets, such productivity growth increases the demand for labour in rural areas, generating jobs for the poor and raising the unskilled labour wage rate. Rural household members diversify their income sources by obtaining better-paid off-farm work, which helps poverty and hunger to decline.

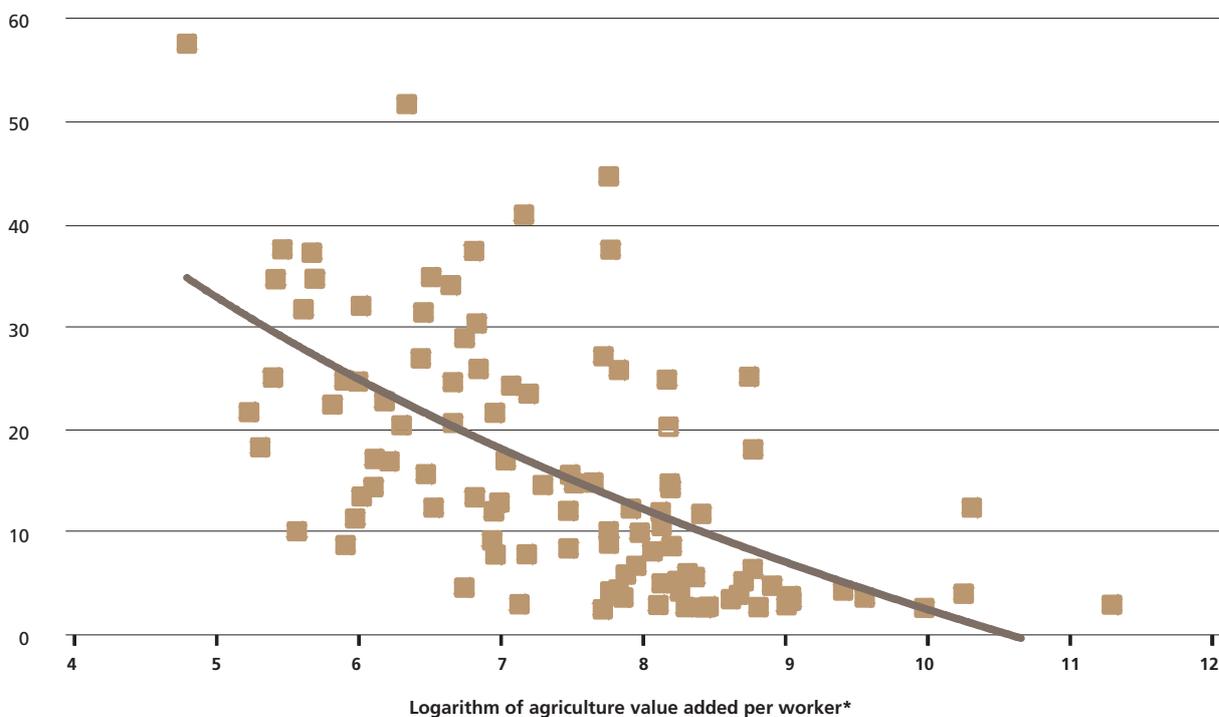
In spite of overall progress, marked regional differences persist. In the early 1990s, average value added per worker in agriculture was lowest in sub-Saharan Africa, approximately US\$700 in 2005 prices, compared with other regions, such as Eastern Asia and Latin America, where it amounted to US\$4 600 and US\$4 400, respectively. By 2010–13, average value added per worker in agriculture in sub-Saharan Africa



FIGURE 16

Agricultural labour productivity and prevalence of undernourishment, 2010

Prevalence of undernourishment (%)



*Expressed in constant 2005 US dollars.
Source: FAO and World Bank.

amounted to US\$1 199, whereas in Eastern Asia and Latin America, it had risen to US\$15 300 and US\$6 000, respectively. Gains in labour productivity have also been slower in sub-Saharan Africa, and so have been the reductions in the PoU, with current levels systematically higher than in other regions.

The evidence suggests that agricultural productivity gains have helped countries reduce undernourishment. For example, over the period 1990–92 to 2012–14 in sub-Saharan Africa, where agriculture is dominated by small family farms, countries that made little progress towards achieving the MDG 1c hunger target, such as Botswana, Côte d'Ivoire, Liberia, Namibia, Swaziland, Uganda, the United Republic of Tanzania and Zambia, experienced average gains in agricultural value added per worker of only 25 percent. These gains were significantly lower than those experienced in Angola, Benin, Ethiopia, Gabon, Ghana, and Mali, countries that have met the MDG 1c hunger target. On average, labour productivity in agriculture in these countries increased by 69 percent between 1990–92 and 2012–14. Over the same period, in sub-Saharan African countries that have made progress towards the target but not yet achieved it, average agricultural value added per worker increased by 42 percent.

Similar patterns are observed when looking at a more traditional measure of agricultural productivity – output per hectare. Significant yield gaps – the difference between farmers' yields and technical potential yields achieved using the latest varieties and under the best of conditions – still persist, particularly in sub-Saharan Africa. Such yield gaps reflect a largely suboptimal use of inputs and insufficient adoption of the most productive technologies. In Mali (an MDG 1c achiever), for example, the yield gap for rainfed maize – in 2008–10 – was 75 percent, a significantly high value but lower than those observed in Uganda (83 percent) and the United Republic of Tanzania (88 percent), suggesting a linkage between agricultural productivity and progress towards food security.³⁸

In the recent past, in many sub-Saharan African countries, agricultural growth has been mostly driven by more extensive use of land and reallocation of productive factors – not necessarily oriented to supplying local markets and reducing food insecurity – rather than the support of public policies to expand access to agricultural credit and insurance, advisory services and sustainable technologies.

Other constraining factors that compromise agricultural productivity gains and the generation of stable incomes for family farmers include weather-related shocks; poor



transport, storage and communications infrastructure; and missing or inefficient markets. Weak institutions and inadequate public agricultural and rural development policies are major causes of such failures.

Inclusive markets for smallholders and family farmers are an important ingredient in promoting food security and nutrition. Markets not only facilitate the flow of food from surplus to deficit areas, ensuring food availability; they also transmit price signals to farmers to adjust their production and input use.³⁹ Well-functioning markets that foster price stability and predictability are crucial – on the one hand, a significant share of farmers rely on markets for generating part of their cash income, while, on the other hand, many family farmers are net-food buyers relying on markets to purchase part of their food needs. Smallholder and family farming productivity and access to markets are interlinked and contribute to both food availability and access to food. Improving access to marketing opportunities can also help boost productivity.

One relevant approach to increasing family farmers' access to markets is local food procurement by different levels of government (local, regional and national). Not only can public purchase schemes guarantee food security for vulnerable populations and income for smallholders and family farmers, but they may also enhance collective action to strengthen their marketing capacities and ensure greater effectiveness.

To accelerate progress in improving access to food by the poor, lagging regions, particularly sub-Saharan Africa, will increasingly have to transform their agricultural policies to significantly improve agricultural productivity and increase the quantity of food supplied by family farmers. The importance of family farming and smallholder agriculture is best reflected by the Comprehensive Africa Agriculture Development Programme (CAADP), which has established a goal of 6 percent annual agricultural growth. The expected impacts are primarily to improve food security and nutrition, reduce poverty and increase employment.

International trade and food security linkages

International trade and trade policies affect the domestic availability and prices of goods and those of the factors of production such as labour, with implications for food access. International trade can also affect market structure, productivity, sustainability of resource use, nutrition and various population groups in different ways. Assessing its impact on food security is thus highly complex. For example, banning grain exports can boost domestic supplies and reduce prices in the short run. This benefits consumers, but has negative implications for farmers producing for export. Import or export restrictions by major players affect global supplies and exacerbate price volatility at the global level. Lowering import duties reduces food prices paid by consumers, but can put pressure on the incomes of import-competing farmers, whose own food security may be negatively affected. Table 5 (p. 34) illustrates the complexity of the relationship between trade and food security by listing the possible effects of trade, both positive and negative, on different dimensions of food security. In practice, the picture is further complicated by market imperfections in national local markets, which prevent the transmission of global price changes to those markets.

■ Lessons from trade policy reforms

Policies to increase openness to international trade have generally taken place in the context of wider economic reforms, and it is therefore difficult to disentangle their effects. A number of case studies have attempted to analyse the

impact of trade on food security, and, not surprisingly, the results have been mixed.⁴⁰ In China, economic reforms have generated positive results for growth, poverty reduction and food security. Trade, which has continued to grow rapidly, has played a part, although domestic reforms appear to have been more important in stimulating growth. Also in Nigeria, domestic reforms improved incentives for agricultural commodity producers, and per capita calorie intake increased substantially after the implementation of trade reforms, pointing to a possible positive impact on food security.

Similarly, in Chile, trade openness and the elimination of policy distortions stimulated both agricultural and overall economic growth and the transition from traditional crops to more profitable products for export. Research has shown that the reforms have contributed substantially to poverty reduction and food security. Peru is another example of the positive food security outcomes of institutional and economic transformations aimed at strengthening private-sector initiatives, including trade openness. However, the country implemented social protection policies and programmes, to address uneven growth across sectors and income inequality and mitigate the negative effects of the reforms on vulnerable parts of the population.

Conversely, in Guatemala, Kenya, Senegal and the United Republic of Tanzania, the food security outcomes of economic and trade reforms appear to have been disappointing. In Guatemala, while the reforms resulted in diversified production of more profitable crops, external factors (such as lower coffee prices) have undermined the



TABLE 5

The possible effects of trade liberalization on dimensions of food security

	Possible positive effects	Possible negative effects
AVAILABILITY	<p>Trade boosts imports and increases both the quantity and variety of food available.</p> <p>Dynamic effects on domestic production: Greater competition from abroad may trigger improvements in productivity through greater investment, R&D, technology spillover.</p>	<p>For net food-exporting countries, higher prices in international markets can divert part of production previously available for domestic consumption to exports, potentially reducing domestic availability of staple foods.</p> <p>For net food-importing countries, domestic producers unable to compete with imports are likely to curtail production, reducing domestic supplies and foregoing important multiplier effects of agricultural activities in rural economies.</p>
ACCESS	<p>For net food-importing countries, food prices typically decrease when border protection is reduced.</p> <p>In the competitive sectors, incomes are likely to increase as the result of greater market access for exports.</p> <p>Input prices are likely to decrease.</p> <p>The macroeconomic benefits of trade openness, such as export growth and the inflow of foreign direct investment, support growth and employment, which in turn boosts incomes.</p>	<p>For net food-exporting countries, the domestic prices of exportable products may increase.</p> <p>Employment and incomes in sensitive, import-competing sectors may decline.</p>
UTILIZATION	<p>A greater variety of available foods may promote more balanced diets and accommodate different preferences and tastes.</p> <p>Food safety and quality may improve if exporters have more advanced national control systems in place or if international standards are applied more rigorously.</p>	<p>Greater reliance on imported foods has been associated with increased consumption of cheaper and more readily available high-calorie/low-nutritional-value foods.</p> <p>Prioritization of commodity exports can divert land and resources from traditional indigenous foods that are often superior from a nutrition point of view.</p>
STABILITY	<p>Imports reduce the seasonal effect on food availability and consumer prices.</p> <p>Imports mitigate local production risks.</p> <p>Global markets are less prone to policy- or weather-related shocks.</p>	<p>For net food-importing countries, relying primarily on global markets for food supplies and open trade policies reduces the policy space to deal with shocks.</p> <p>Net food-importing countries may be vulnerable to changes in trade policy by exporters, such as export bans.</p> <p>Sectors at earlier stages of development may become more susceptible to price shocks and/or import surges.</p>

potential to improve food security. In Kenya, limited coordination in policy sequencing seems to have slowed progress against hunger. The reforms in Senegal have shown mixed results; although the PoU declined on aggregate, female-headed households became less food-secure.

Indeed, the constraints faced by rural women, in terms of lack of access to productive factors, such as land, credit, inputs, storage and technology, may undermine their capacity to adopt new technologies and/or take advantage of economies of scale to improve their competitiveness. In several developing countries, female small farmers who are unable to compete with cheaper agricultural imports have been forced to abandon or sell their farms, which in turn can contribute to their food insecurity.⁴¹

While trade in itself is not intrinsically detrimental to food security, for many countries, particularly those at earlier levels of development, trade reforms can have negative effects on food security in the short-to-medium term. Recent research shows that countries supporting the primary sector tend to be better off on most dimensions of food security (food availability, access, and utilization), while taxation of this sector is detrimental to food security.⁴² However, the evidence also shows that excessive support can also lead to poor performances on all dimensions of food security.

As countries become more open to international trade in agricultural products, they become more exposed and potentially more vulnerable to sudden changes in global agricultural markets. For example, import surges – sudden increases in the volume of imports from one year to the next – can hinder the development of agriculture in developing countries.

Food sectors in developing countries that are characterized by low productivity and lack of competitiveness are especially vulnerable to import surges. A sudden disruption of domestic production can have disastrous impacts on domestic farmers and workers – loss of jobs and reduced incomes, with potentially negative consequences for food security. During the period 1984–2013, China, Ecuador, India, Kenya, Nigeria, Pakistan, Uganda, the United Republic of Tanzania and Zimbabwe were prone to sudden increases in imports (defined as imports exceeding the average of the previous three years by more than 30 percent), registering more than a hundred surges.⁴³

The factors that lead to an import surge may originate in the importing country itself as a result of domestic supply shortfalls or rapid increases in demand. Other factors are exogenous, for example when countries providing significant support to the production and/or export of food products channel production surpluses to the international markets.



Surges resulting from external factors can be difficult for the affected countries to manage.

Serious disruptions in domestic markets and negative food security outcomes have been used to support arguments for a more cautious approach to greater openness to agricultural trade and for the establishment of effective safeguards in new trade agreements. In circumstances where the agriculture sector has yet to play out its potential growth-enhancing role, trade policy, including trade remedies, and incentives to boost domestic production can have potentially important roles to play. At the same time, complementary policies (as in the case of Peru) can protect the most vulnerable groups from the possible negative effects of openness to trade.

■ Trade in the new agricultural markets context

The international agricultural market context has changed from one characterized by depressed and stable prices to one where market reactions to climatic and economic shocks can give rise to sudden price increases or falls. Such changes have

prompted reassessment of the role of trade and trade policies in promoting food security.

As food import bills have risen significantly following increases in food prices in 2008, confidence in global markets as reliable sources of affordable food has waned, and attention has turned to support for domestic food production. As a result, some developing countries have adopted policies designed to influence domestic prices directly through border measures and price controls, or to create incentives for increasing domestic supply. Among the available trade policy instruments, export restrictions and the elimination of import tariffs have been the preferred policies to address food security concerns during periods of high and volatile prices.

Trade, in itself, is neither a threat nor a panacea when it comes to food security, but it can pose challenges and even risks that need to be considered in policy decision-making. To ensure that countries' food security and development needs are addressed in a consistent and systematic manner, they need to have a better overview of all the policy instruments available to them and the flexibility to apply the most effective policy mix for achieving their goals.

The relevance of social protection for hunger trends between 1990 and 2015

Social protection has directly contributed to hunger reduction over the MDG monitoring period. Since the late 1990s, there has been a global trend towards the extension of cash transfers and other social assistance programmes, triggered in part by the financial crises in emerging market economies during that time.⁴⁴ Social protection has since been progressively anchored in national legislation, increasing its coverage to support vulnerable groups.

Coverage has increased for many reasons, including the recognition that social protection can be instrumental in promoting sustainable and inclusive growth. Social protection is a crucial part of the policy spectrum that addresses high and persistent levels of poverty and economic insecurity, high and growing levels of inequality, insufficient investments in human resources and capabilities, and weak automatic stabilizers of aggregate demand in the face of economic shocks.

With sufficient coverage and proper implementation, social protection policies can promote both economic and social development in the short and longer term, by ensuring that people enjoy income security, have effective access to health care and other social services, are able to manage risk and are empowered to take advantage of economic opportunities. Such policies play a crucial role in fostering inclusive and

sustainable growth, strengthening domestic demand, facilitating the structural transformation of national economies, and promoting decent work.⁴⁵

Between 1990 and 2015, social protection programmes have grown exponentially. Although much of this increase occurred in high- and middle-income countries, significant progress in social protection coverage has also been made in the developing regions, as for example in Africa, through innovative cash transfer and health-care programmes.⁴⁶ Today, every country in the world has at least one social assistance programme in place. School-feeding programmes – the most widespread type of social protection programme – are implemented in 130 countries. Unconditional cash transfers are also common, and are now implemented in 118 countries globally. Likewise, conditional cash transfer and public works/community asset programmes continue to expand rapidly.⁴⁷ Global and regional efforts have also been instrumental, including the push for national social protection floors endorsed by International Labour Organization (ILO) Recommendation 202.⁴⁸ Yet, despite the proliferation of programmes around the world, the ILO estimates that 70 percent of the world's poor still do not have access to adequate social protection.⁴⁹



International organizations, such as FAO and WFP, play important roles in designing and implementing efficient and effective safety net programmes and social protection systems in the countries with a focus on food security and nutrition. Social protection systems often meet immediate food gap needs and, if designed accordingly, they can help improve lives and livelihoods – a key factor for reducing the number of hungry people in the world.

Recent research concludes that approximately 150 million people worldwide are prevented from falling into extreme poverty thanks to social protection.⁵⁰ However, the impact of social assistance programmes such as cash transfers on well-being extends beyond the direct effects of transfers. Transfers can help households manage risk and mitigate the impact of shocks that keep households mired in poverty.

Social assistance programmes such as cash transfer programmes can influence the productive capacity of beneficiaries, in particular those with limited access to financial services for investment and risk mitigation. The provision of regular and predictable cash transfers brings significant benefits when markets are missing or do not function well. When transfers are of sufficient size and combined with additional support to beneficiaries, they can often be saved and/or invested in productive assets and can improve social inclusion for even greater returns over the participants' lifetimes.⁵¹ In combination with savings and credit, environmental rehabilitation and agricultural insurance, transfers can encourage prudent risk-taking and increase productive outcomes – even for the poorest households.⁵²

BOX 3

The Productive Safety Net Programme in Ethiopia

Established in 2005, the Productive Safety Net Programme (PSNP) is designed to enable the rural poor facing chronic food insecurity to resist shocks, create assets and become food self-sufficient. The programme provides predictable multi-annual transfers, as food, cash or a combination of both, to help chronically food-insecure people survive food-deficit periods and avoid depleting their productive assets while attempting to meet their basic food requirements.

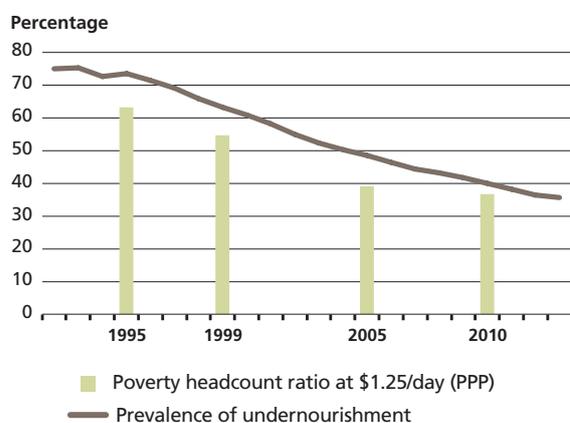
The combination of cash and food transfers is based on season and need, with food given primarily during the lean season between June and August. Vulnerable households

receive six months of assistance each year to protect them from acute food insecurity. Able-bodied members of households participating in the programme are required to contribute to productive activities that will build more resilient livelihoods, such as rehabilitating land and water resources and developing community infrastructure, including rehabilitating rural roads and building schools and clinics.

Studies have shown that PSNP has had a positive impact on the livelihoods of participating households. On average, across the regions in which the programme operates (Afar, Amhara, Dire Dawa, Harare, Oromiya, SNNP, Somali and Tigray), its predictable transfers have shortened the lean season, during which the rural poor are most food-insecure, by over one month – the most significant improvement took place in Amhara, where the lean season was shortened by nearly two months. The programme also contributed towards increasing children's access to food. During the lean seasons between 2006 and 2010, the average number of meals consumed by children in targeted households rose by 15 percent.

In some cases, the longer a household participates in the programme, the shorter the lean period can become. This is because regular and predictable cash transfers lead to increased on-farm investments and improve the productive capacity of beneficiary households. On average, five years of participation raises livestock holdings each year by 0.38 tropical livestock units, a weighted aggregation of different kinds of livestock. In Oromiya, beneficiary households experienced an increase in the value of productive assets of 112 birr.

Poverty and prevalence of undernourishment, Ethiopia, 1992–2013



Sources: FAO and World Bank.

Source: G. Berhane, J. Hoddinott, N. Kumar and A.S. Taffesse. 2011. *The impact of Ethiopia's productive safety nets and household asset building programme: 2006–2010*. Washington, DC, International Food Policy Research Institute.



Social assistance programmes, particularly when combined with additional interventions in the areas of drinking water supply, health and/or education, have been shown to enhance nutritional outcomes and promote human capital. The integration of nutrition objectives into social assistance programmes also has the potential to significantly accelerate progress in reducing undernutrition and raising economic productivity.⁵³ Furthermore, women are direct beneficiaries of many social assistance programmes, such as cash transfers. With more control of resources, this has empowered them with positive impacts on food security and nutritional status, especially of children.⁵⁴ However, such positive outcomes depend on other contextual factors and require complementary interventions.

Over the past twenty five years, evidence has emerged that social protection programmes can play a significant role in achieving food security and nutrition targets. The evidence

suggests that increasing spending for strengthened social protection programmes can be a highly cost-effective way to promote rural poverty reduction and improved food security and nutrition, and, hence, to achieve development goals.⁵⁵ The fact that, despite the rapid growth of social protection programmes in recent decades, about 70 percent of the world population still lacks access to more adequate, formal forms of social security, indicates there is still considerable need for expanded coverage and, hence, scope for accelerating the eradication of hunger. However, just expanding social protection programmes will not suffice. The most effective social protection policies for improved food security and rural poverty reduction have been those that are well integrated with agriculture sector policies and fully aligned with the priorities and vision set out in broader strategies aimed at creating viable and sustainable livelihoods for the poor.

Protracted crises and hunger

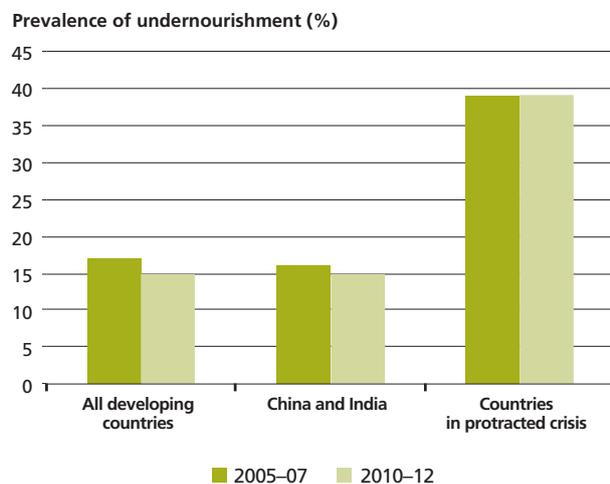
Countries and areas in protracted crisis are “environments in which a significant proportion of the population is acutely vulnerable to death, disease and disruption of livelihoods over a prolonged period of time. Governance in these environments is usually very weak, with the state having limited capacity to respond to, and mitigate, threats to the population, or to provide adequate levels of protection.”⁵⁶ Based on the criteria set out in *The State of Food Insecurity in the World 2010*,⁵⁷ the list of countries considered to be in protracted crisis situations was updated in 2012 to encompass 20 countries⁵⁸. However, it should be noted that some protracted crisis situations are limited to specific geographic areas, and may not affect the entire country, let alone the entire population.

Although protracted crises are diverse in both their causes and effects, food insecurity and malnutrition are common prevalent features.⁵⁹ Food insecurity and malnutrition are particularly severe, persistent and widespread in protracted crisis contexts. The approximate combined population in protracted crisis situations in 2012 was 366 million people, of whom approximately 129 million were undernourished between 2010 and 2012 (including conservative estimates for countries lacking data). This accounted for approximately 19 percent of the global total of food-insecure people. In 2012, the mean prevalence of undernourishment in protracted crisis situations was 39 percent, compared with 15 percent, on average, in the rest of the developing world (see Figure 17).

Achieving the MDG 1c target of halving the proportion of undernourished population in these countries poses an enormous challenge. Of the 20 countries in protracted crisis identified above, only one, Ethiopia, has reached the MDG 1c target. All the others report either insufficient progress or even deterioration.

FIGURE 17

Food insecurity: are protracted crises different?



Source: FAO.

■ The typology of crises

Over the past 30 years, the typology of crises has gradually evolved from catastrophic, short-term, acute and highly visible events to more structural, longer-term and protracted situations resulting from a combination of multiple contributing factors, especially natural disasters and conflicts, with climate change, financial and price crises increasingly frequent among the exacerbating factors. In other words, protracted crises have become the new norm, while acute short-term crises are now the exception. Indeed, more crises are considered protracted today than in the past.⁶⁰

From a food security and nutrition perspective, in 1990, only 12 countries in Africa were facing food crises, of which only four were in protracted crisis. Just 20 years later, a total of 24 countries were facing food crises, with 19 of these having been in crisis for eight or more of the previous ten years.⁶¹ Moreover, the growing imperative of dealing with the long-term contexts of these emergencies is becoming evident. For instance, the

Bosphorus Compact⁶² reported that global humanitarian appeals between 2004 and 2013 increased by 446 percent overall – rising from US\$3 billion to US\$16.4 billion. Similarly, the number of displaced people at the end of 2013 was 51.2 million, more than at any point since the end of World War Two. The average length of displacement in major refugee situations is now 20 years. And nine out of ten humanitarian appeals continue for more than three years, with 78 percent of spending by the Organisation for Economic Co-operation and Development's Development Assistance Committee donors allocated to protracted emergencies.

Over the past three decades, the causes of crises have become more interconnected, displaying an evolving trend of triggers for protracted crises due to natural causes, either human-induced, or stemming from a combination of human and natural causes.⁶³ Conflicts are increasingly the main underlying cause, with the prevalence of human-induced conflicts higher than previously. As such, conflicts are now a common feature of crises. The complex relation between conflict and food security and nutrition is still to be fully explored (Box 4).

BOX 4

Conflict and political instability

Food insecurity can be a direct result of violent conflict and political instability as well as an exacerbating factor. On the one hand, food insecurity is among the factors that can trigger and/or deepen conflict, often due to underlying economic and structural factors. For instance, sudden and unforeseen food price rises, or the reduction or removal of subsidies on basic foodstuffs, can be a catalyst for civil and political unrest, as in the social upheaval and political violence of the Arab Spring in 2011 when governments in the Near East reduced subsidies for bread. Natural disasters, drought and famine can also contribute to political unrest and violent conflict, as evidenced by the Sahel and West Africa region. Food insecurity can exacerbate political instability and violent conflict when specific groups are economically marginalized, services are distributed inequitably or where there is competition over scarce natural resources needed for food security. Periodic conflicts between farmers and herders in the semi-arid Sahel and East Africa regions illustrate this.¹

On the other hand, mortality caused by conflict due to food insecurity and famine can far exceed deaths caused directly by violence. Conflict disrupts livelihoods in rural and urban areas, and undermines smallholder agricultural productivity; it is a leading cause of hunger and undermines food security and nutrition in multiple ways. All situations of extreme food insecurity and famine in the Horn of Africa since the 1980s have been characterized by conflict in some form, transforming food security crises into devastating

famines. Globally, between 2004 and 2009, around 55 000 people lost their lives each year as a direct result of conflict or terrorism.² In contrast, famine caused by conflict and drought resulted in the deaths of more than 250 000 people in Somalia alone between 2010 and 2012.³

Figures from ongoing conflicts and political instability reinforce this link. In Iraq, food prices are high and volatile in conflict-affected governorates, with the food basket costing 25–30 percent more than in the capital Baghdad.⁴ Stressed crop conditions are clearly visible through satellite imaging, which confirms the negative impact of the conflict on irrigation, availability of agricultural inputs and access to fields. In Palestine, displacement, livelihood disruption and increasing unemployment has led to a recent deterioration in food security. In 2013, 33 percent of all Palestinians were considered to be food-insecure (19 percent in the West Bank and 57 percent in the Gaza Strip), with a further 16 percent considered to be particularly vulnerable to becoming food-insecure.⁵ At the start of 2015, as a result of continuing violence, civil unrest and fragmentation in the Syrian Arab Republic, coupled with international sanctions, disrupted food production and hikes in domestic fuel and food prices, 9.8 million people required various levels of food, agriculture and livelihood-related assistance. Of these, 6.8 million people were in critical need of food assistance.⁶

In South Sudan, between January and March 2015, some 2.5 million people were facing Crisis (IPC Phase 3) or Emergency (IPC Phase 4) levels of food insecurity⁷ as the



■ Ways in which crises impact food security

Protracted crises undermine food security and nutrition in multiple ways, affecting the availability, access and utilization of food. Disruptions to crop production, livestock rearing and trade can have a negative impact on food availability. People's access to food is frequently affected in crises because of displacement, disruptions to livelihoods, or when land is taken. For example, when state and customary institutions are unable or unwilling to protect and promote individuals' legal rights, attempts to take land from women, orphans and other vulnerable individuals go unchecked.⁶⁴ Finally, the utilization of food can be impacted by changes in intra-household and community relations and power dynamics and by inequitable service delivery.

Food insecurity can be further deepened and self-perpetuating as people use up their reserves of food, finance and other assets, and turn to unsustainable coping mechanisms, such as selling off productive assets and taking up activities that lead to land degradation to meet immediate food needs.

Gender and age are two powerful determinants of the impact of protracted crises on individuals. Women are more likely than men to be affected and their access to aid can be undermined by gender-based discrimination. Pre-existing gender-based disparities in access to assets such as land, property or credit mean that women have often fewer financial resources than men to cope with impacts such as loss of productive capacity, leaving them unable to afford the increased prices of food in crisis-affected areas.⁶⁵ Protracted crises have also been found to put additional care burdens on women post-crisis, while limited mobility and work opportunities outside the home reduce their range of coping strategies. Often, with male household members absent, due to death, migration or recruitment into armed forces, women are not always able to claim family assets, such as land, livestock, tools and machinery, previously owned by their husbands, especially if they are illiterate or insufficiently aware of their legal rights with significant negative implications for food security.

conflict had displaced populations, reduced food production and disrupted markets.⁸ It is worth noting that prior to the eruption of conflict in December 2013, no one in South Sudan was in IPC Phase 4. The immediate effects of the conflict on the food security situation were highlighted by the revised IPC analysis in May 2014, which reported some 3.5 million people in IPC Phases 3 and 4, of which more than 1 million were facing Emergency (Phase 4) level.⁹ Similarly, the conflict in the Central African Republic has exacerbated food insecurity. In April–May 2014, IPC estimated (although with limited confidence) that roughly 1.7 million people were severely food-insecure (IPC Phases 3

and 4).¹⁰ This was a sharp increase from 900 000 people estimated in November 2013, prior to the outbreak of conflict.

In all these examples, it is likely that the major causes of current food insecurity will persist for some time, with households increasingly adopting short-term coping and survival strategies that can render livelihoods unsustainable and jeopardise future prospects, for example selling productive assets such as livestock, or remaining heavily reliant on food assistance. In such contexts, progress towards the MDG 1c target in these countries is likely to be extremely difficult to achieve.

¹ M. Moritz. 2012. *Farmer-herder conflicts in sub-Saharan Africa* (available at <http://www.eoearth.org/view/article/51cbdc67896bb431f693d72>).

² Geneva Declaration on Armed Violence and Development. 2011. *Global Burden of Armed Violence 2011: Lethal encounters*. Geneva, Switzerland, Geneva Declaration Secretariat; IFAD. 2011. *IFAD Guidelines for Disaster Early Recovery* (EB 2011/102/R.29). Rome; and IFAD. 2006. *IFAD Policy on Crisis Prevention and Recovery* (EB 2006/87/R.3/Rev.1). Rome.

³ FAO. 2013. *Study suggests 258 000 Somalis died due to severe food insecurity and famine*. News release (available at <http://www.fao.org/somalia/news/detail-events/en/c/247642/>).

⁴ WFP. 2015. *Global food security update*. Issue 17, March 2015 (available at <http://documents.wfp.org/stellent/groups/public/documents/ena/wfp272750.pdf>).

⁵ Food Security Cluster. 2014. *Food insecurity in Palestine remains high*. Socio-Economic and Food Security (SEFSec) High Level Statement, June 2014 (available at <http://foodsecuritycluster.net/document/sefsec-high-level-statement-june-2014>).

⁶ WFP. 2014. *Syrian Arab Republic: Highlights as of December 2014*. Food security analysis website (available at http://nam.wfp.org/CountryPage_overview.aspx?iso3=SYR).

⁷ The Integrated Food Security Phase Classification (IPC) scale categorizes the severity of acute food insecurity into five phases, from "1 – Minimal" to "5 – Famine", each with distinct implications for proactive decision-making regarding appropriate and effective response (see <http://www.ipcinfo.org/ipcinfo-home/en/>).

⁸ IPC. 2015. *South Sudan – 2.5 million people in either Crisis or Emergency between January and March 2015*. News release (available at <http://www.ipcinfo.org/ipcinfo-detail-forms/ipcinfo-news-detail/en/c/276738/>).

⁹ IPC. 2014. *South Sudan communication summary* (available at http://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_SouthSudan_Sept%202014_Communication_Summary.pdf).

¹⁰ IPC. 2014. *IPC Alert: Central African Republic calls for immediate actions to avoid a worsening emergency situation*. Web alert (available at <http://www.ipcinfo.org/ipcinfo-detail-forms/ipcinfo-news-detail/en/c/232629/>).

BOX 5

Threats of natural disasters and climate change to food security

Exposure to natural hazards and disasters is a major cause of food insecurity, a problem exacerbated by climate change. Between 2003 and 2013, natural hazards and disasters in the developing regions affected more than 1.9 billion people and resulted in nearly half a trillion US dollars in estimated damage. Through a review of post-disaster needs assessments in 48 developing countries, FAO estimated that the agriculture sector absorbs approximately 22 percent of the total economic impact of these disasters,¹ clearly affecting the capacity of the sector to support food security.

Small island developing states (SIDS) are at particular risk.² The World Bank estimates that SIDS countries account for two-thirds of the countries incurring the highest relative losses due to natural disasters each year. In the Pacific Islands region alone, infrastructure, buildings and cash crops with an estimated value of US\$112 billion are considered to be at risk of natural disasters.³ In the Caribbean, annual damage to infrastructure from natural disasters is estimated between US\$0.5 to 1.0 billion.⁴

Climate change multiplies the risks of natural hazards, through altered rainfall and temperature patterns as well as increased frequency and intensity of extreme events such as drought and flooding.⁵ The Fifth Assessment Report of the Intergovernmental Panel on Climate Change, released in 2014, noted that climate change is already having a negative impact on agriculture, affecting major crops, livestock production and fisheries. These tropical areas of high exposure to climate change are also characterized by high food insecurity.

When disasters strike, they have immediate repercussions on the livelihoods and food security of millions of family farmers and smallholders, pastoralists, fishers and forest-dependent communities in developing countries where agriculture employs from 30 to over 80 percent of the population. Considering only the impacts of major events for a limited number of countries over the 2003–13 period, estimates of losses were about US\$13 billion for the crop sector, mainly due to flooding and storm damage and US\$11 billion for livestock, principally attributable to drought, and these are only a small fraction of the total costs actually incurred.⁶

Natural disasters also have a wide and complex range of indirect effects on food security. Greater uncertainty and higher risks reduce the incentives to invest in agricultural production, particularly for family farmers and smallholders with limited or no access to credit and insurance.⁷ Greater emphasis on low-risk, but low-returning production activities, and lowered levels of fixed and operating capital inputs, generally lead to both lower current and future farm profits. Natural disasters also give rise to reductions in food consumption, education

and healthcare, which, in turn, can lead to long-term losses in terms of income generation and future food security. In the United Republic of Tanzania, for example, crop shocks going back to 1991–95 provoked consumption growth losses of between 17 and 40 percent in 2004.⁸

Taken together, exposure to natural disasters, exacerbated by climate change, can pose significant challenges to countries in their progress towards the international hunger targets. Reducing vulnerability to natural hazards and climate change requires a comprehensive strategy to minimize risk exposure while maximizing effective responses. This includes increasing the resilience of agro-ecosystems through sustainable land management approaches, together with programmes to enhance socio-economic resilience such as social protection, improved agricultural market governance and value chain development, as well as insurance programmes and effective early warning systems. Resilience-building is specific to local conditions and thus capacity to identify and implement strategies at local level is key.

Empirical evidence from various countries has shown that implementing disaster risk-reduction measures can produce long-term benefits – from reduced future losses to more resilient livelihoods and productive agro-ecosystems. Countries such as Bangladesh, Cuba, Madagascar and Viet Nam have been able to reduce drastically the impact of weather related hazards, such as tropical storms and floods, through improved early warning systems and other disaster-preparedness and risk-reduction measures.⁹

¹ FAO. 2015. *The impact of natural hazards and disasters on agriculture and food and nutrition security: a call for action to build resilient livelihoods*. Rome.

² FAO. 2015. *Food security and nutrition in Small Island Developing States*. Rome.

³ World Bank. 2012. *Acting today for tomorrow: a policy and practice note for climate- and disaster- resilient development in the Pacific Islands region*. Washington, DC.

⁴ World Bank. 2013. *Building resilience: integrating climate and disaster risk into development: lessons from World Bank Group experience*. Washington, DC.

⁵ IPCC, 2014: Summary for policymakers. In: IPCC. *Climate Change 2014: impacts, adaptation, and vulnerability*. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, pp. 1–32. Cambridge, UK and New York, USA, Cambridge University Press.

⁶ Op cit., see note 1.

⁷ J.R. Porter, L. Xie, A.J. Challinor, K. Cochrane, S.M. Howden, M.M. Iqbal, D.B. Lobell and M.I. Travasso. 2014. Food security and food production systems. In: IPCC. *Climate Change 2014: impacts, adaptation, and vulnerability*. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, pp. 485–533. Cambridge, UK and New York, USA, Cambridge University Press.

⁸ K. Beegle, J. de Weerd and S. Dercon. 2008. Adult mortality and consumption growth in the age of HIV/AIDS. *Economic Development and Cultural Change*, 56(2): 299–326.

⁹ United Nations. 2010. *Keeping the promise: united to achieve the Millennium Development Goals*. New York, USA.



■ Why is it so difficult to deal with food insecurity and malnutrition in protracted crises?

Addressing food insecurity and malnutrition in protracted crises is particularly challenging. Evidence shows that stakeholders need to address the critical manifestations of protracted crises, such as hunger and malnutrition, and disruption to and depletion of livelihoods, while simultaneously addressing underlying causes such as poor governance, inadequate capacities, limited access to scarce natural resources and conflict.

In addition, policies and actions have to consider the specific features and complex challenges presented by protracted crises, including their longevity; the particular need to protect marginalized and vulnerable groups, and to respect basic human rights; the mismatch between short-term funding mechanisms and long-term needs, and how best to integrate humanitarian and development assistance; the often poor coordination of responses; and inadequate ownership by national stakeholders of response-related processes. Finally, the context specificity of protracted crises

makes it difficult, and undesirable, to adopt “one-size-fits-all” approaches.

Nonetheless, examples exist of good practices in addressing some of the issues at the root of protracted crises, ranging from innovative funding mechanisms such as crisis modifiers, to more comprehensive country owned processes (see Box 6 for more details). In addition, rural women should be seen as partners in the rehabilitation process rather than simply “victims”. Indeed, evidence indicates that relief programmes that adopt a gender perspective can avert widespread malnutrition and lead to quick and more extensive recovery in food production and other aspects of livelihoods.⁶⁶

Protracted crises are becoming an increasingly important global problem, negatively impacting on people’s food security and nutrition, and often the result of instability and conflict. Successful experiences exist, but need to be scaled up, which requires a high degree of political commitment at all levels (see Box 7). Current efforts by the Committee on World Food Security (CFS) to finalize a Framework for Action for Food Security and Nutrition in Protracted Crises could be an important first step to mobilize political commitment and guide action.

BOX 6

Crisis modifiers as innovative financing mechanisms

Crisis modifiers are budget lines in longer-term interventions that can quickly shift programmatic objectives towards mitigation of a crisis without going through the lengthy process of fund-raising and proposal writing. This mechanism enables a more integrated, agile and flexible approach that can reduce the erosion of development gains in times of crisis while responding to immediate needs. As such, it is a valuable approach to sequencing and integrating humanitarian and development assistance around the shared goal of building resilience. This approach was pioneered by the United States Agency for International Development (USAID) / Office of United States Foreign Disaster Assistance (OFDA) in Ethiopia to shift development funding to deliver immediate, life-saving interventions in response to the 2011 drought.

Shift toward comprehensive risk management

A range of sophisticated risk management models at continental, national and community levels are being rolled out to provide contingency funding to governments and insurance to farmers in the event of a severe drought or other natural disasters. The African Risk Capacity (ARC) is one such example. ARC is a novel partnership, between the African Union, UN agencies, philanthropic foundations

and aid providers, which aims to be an “... Africa-owned, standalone financial entity that will provide African governments with timely, reliable and cost-effective contingency funding in the event of a severe drought by pooling risks across the continent”.¹ ARC translates country-specific rainfall data into an approximate “response cost”. Countries pay premiums, based on probable risks, to an index-based insurance mechanism – thus pooling the risk of drought across several countries and taking advantage of the weather system diversity across Africa. There are analogous community-level systems such the R4 Rural Resilience Initiative in Ethiopia and Senegal to support resilience to climate variability and shocks. Insurance and other innovative financing mechanisms are not stand-alone solutions, but elements that should be considered as part of a more comprehensive package that reduces risks, supports livelihoods and protects assets in crisis situations.

¹ African Union and WFP. 2012. *African Risk Capacity (ARC) briefing book* (available at http://www.africanriskcapacity.org/c/document_library/get_file?uuid=9fb04f73-f7c4-47ea-940f-ebe275f55767&groupId=350251).

BOX 7

Addressing food security and nutrition issues in protracted crisis situations: success story

Successful interventions in addressing food security and nutrition issues in protracted crisis situations are often seen to be more about preventive actions than responses to the impacts of recurrent crises. One positive country example in dealing with recurrent food security crises is Ethiopia, which recently reached the MDG 1c hunger target.

The positive results can be attributed to several interlinked factors: first, an unprecedented GDP annual growth rate of 10 percent, and second, a political shift from humanitarian and emergency interventions towards longer-term interventions aimed at dealing with the structural causes of hunger, vulnerability and poverty in

the most vulnerable and resource-depleted areas of the country. Until 2005, short-term, mainly food-aid-driven responses were the standard response to such events. Since 2005, the Government has implemented a widespread social protection programme, the Productive Safety Net Programme (PSNP). This reaches some 7.5 million vulnerable people through a cash/food-for-work approach. The added value is that, while providing the most vulnerable groups with adequate entitlements to access food, it also enables them to combat the structural causes of food insecurity, for example by improving agricultural activities and investing in rural infrastructure.

Key findings

- **Economic growth is necessary for sustaining progress in efforts to reduce poverty, hunger and malnutrition. But it is not sufficient.**
- **Inclusive growth – growth that provides opportunities for those with meagre assets, skills and opportunities – improves the incomes and livelihoods of the poor, and is effective in the fight against hunger and malnutrition. Rural people make up a high percentage of the hungry and malnourished in developing countries, and efforts to promote growth in agriculture and the rural sector can be an important component of a strategy for promoting inclusive growth and improving food security and nutrition.**
- **Improving the productivity of resources held by family farmers and smallholders is, in most cases, an essential element of inclusive growth and has broad implications for the livelihoods of the rural poor and for the rural economy in general. Well-functioning markets for food, inputs and labour can help to integrate family farmers and smallholders in the rural economy and enable the rural poor to diversify their livelihoods, which is critical for managing risk, and reducing hunger and malnutrition.**
- **In many situations, international trade openness has an important potential for improving food security and nutrition by increasing food availability and for promoting investment and growth. International trade agreements should provide for effective safeguards and greater policy space for developing countries to avoid detrimental effects on domestic food security and nutrition.**
- **Social protection directly contributes to the reduction of hunger and malnutrition by promoting income security and access to better nutrition, healthcare and education. By increasing human capacities and mitigating the impact of shocks, social protection fosters the ability of the very poor to participate in the growth process through better access to decent employment.**
- **Prevalence of food insecurity and malnutrition is significantly higher in protracted crisis contexts resulting from conflict and natural disasters. Strong political commitment is necessary to address the root causes of protracted crisis situations. Action should focus on addressing vulnerability, respecting basic human rights and integrating humanitarian and development assistance.**

