diversity, variety, nutrient content and safety. To date, security and nutrition is about more than just possible, growth must not only benefit the poor, but their additional income to purchase locally produced economy, as smallholders are likely to use most of opportunities for linkages with the rural non-farm smallholders into markets will not only help meet smallholders are then able to benefit more directly effective in reducing poverty and hunger when corruption, and effective institutions. One of the most important conditions for growth that often reaches the poor is agricultural growth, especially when based on increased productivity of smallholders. Agricultural growth is especially important in low-income countries, where agriculture’s contribution to reducing poverty is greatest. Agriculture is also particularly effective in reducing poverty and hunger when inequality in asset distribution is not high, because smallholders are then able to benefit more directly from growth. A greater focus on integrating smallholders into markets will not only help meet future food demand, but will also open up increased opportunities for linkages with the rural non-farm economy, as smallholders are likely to use most of their additional income to purchase locally produced goods and services.

In order to reduce undernourishment as rapidly as possible, growth must not only benefit the poor, but must also be “nutrition-sensitive”. Improving food security and nutrition is about more than just increasing the quantity of energy intake – it is also about improving the quality of food in terms of dietary diversity, variety, nutrient content and safety. To date, the linkage between economic growth and nutrition has been weak, with long lags before growth is translated into real changes in nutritional status. Policies in support of such objectives should be pursued within an integrated agriculture-nutrition-health framework. And while economic growth is important for improving people’s nutrition, the links run in the other direction as well – nutritious diets are vital for people’s full physical and cognitive potential and health, thus contributing to economic growth. Improved childhood nutrition and access to education can improve cognitive development and thereby raise income levels when those children become adults, with personal benefits as well as benefits for society as a whole. Equitable and strong economic growth based on growth of the rural economy of low-income countries goes a long way towards enhancing access to food and improving the nutrition of the poor. However, some of the changes made possible through economic growth take time to bear fruit, and the neediest population groups often cannot take immediate advantage of the opportunities it generates. Thus, in the short-term, social protection is needed to support the most vulnerable so that hunger and undernourishment can be reduced as soon as possible. But social protection can also reduce undernourishment in the long term. First, it improves nutrition for young children – an investment that will pay off in the future with better educated, stronger and healthier adults. Second, it helps mitigate risk, thus promoting technology adoption and economic growth. By designing a well-structured system of social protection to support and complement economic growth, undernourishment and malnutrition can be eliminated as quickly as possible.

The State of Food Insecurity in the World 2012 presents new estimates of the number and proportion of undernourished people going back to 1990, defined in terms of the distribution of dietary energy supply. With almost 870 million people chronically undernourished in 2010–12, the number of hungry people in the world remains unacceptably high. The vast majority live in developing countries, where about 850 million people, or slightly fewer than 15 percent of the population, are estimated to be undernourished.

Despite significant improvements this year to the FAO methodology for estimating undernourishment, further improvements and better data are needed to capture the effects of food price and other economic shocks. Therefore, the undernourishment estimates do not fully reflect the effects on hunger of the 2007–08 price spikes or the economic slowdown experienced by some countries since 2009, let alone the recent price increases. Other indicators are also needed to provide a more holistic assessment of undernourishment and food security.

The revised results imply that the Millennium Development Goal (MDG) target of halving the prevalence of undernourishment in the developing world by 2015 is within reach, if appropriate actions are taken to reverse the slowdown since 2007–08.

Key messages

- Economic growth is necessary but not sufficient to accelerate reduction of hunger and malnutrition

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- Improved undernourishment estimates, from 1990, suggest that progress in reducing hunger has been more pronounced than previously believed.

- Most of the progress, however, was achieved before 2007–08. Since then, global progress in reducing hunger has slowed and levelled off.

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- In order for economic growth to enhance the nutrition of the neediest, the poor must participate in the growth process and its benefits: (i) growth needs to involve and reach the poor; (ii) the poor need to use the additional income for improving the quantity and quality of their diets and for improved health services; and (iii) governments need to use additional public resources for public goods and services to benefit the poor and hungry.

- Agricultural growth is particularly effective in reducing hunger and malnutrition. Most of the extreme poor depend on agriculture and related activities for a significant part of their livelihoods. Agricultural growth involving smallholders, especially women, will be most effective in reducing extreme poverty and hunger when it increases returns to labour and generates employment for the poor.

- Economic and agricultural growth should be "nutrition-sensitive". Growth needs to result in better nutritional outcomes through enhanced opportunities for the poor to diversify their diets; improved access to safe drinking water and sanitation; improved access to health services; better consumer awareness regarding adequate nutrition and child care practices; and targeted distribution of supplements in situations of acute micro-nutrient deficiencies. Good nutrition, in turn, is key to sustainable economic growth.

- Social protection is crucial for accelerating hunger reduction. First, it can protect the most vulnerable who have not benefited from economic growth. Second, social protection, properly structured, can contribute directly to more rapid economic growth through human resource development and strengthened ability of the poor, especially smallholders, to manage risks and adopt improved technologies with higher productivity.

- To accelerate hunger reduction, economic growth needs to be accompanied by purposeful and decisive public action. Public policies and programmes must create a conducive environment for pro-poor long-term economic growth. Key elements of enabling environments include provision of public goods and services for the development of the productive sectors, equitable access to resources by the poor, empowerment of women, and design and implementation of social protection systems. An improved governance system, based on transparency, participation, accountability, rule of law and human rights, is essential for the effectiveness of such policies and programmes.
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Undernourishment around the world

About 870 million people are estimated to have been undernourished in the period 2010–12. This represents 12.5 percent of the global population, or one in eight people. The vast majority of these – 852 million – live in developing countries, where the prevalence of undernourishment is now estimated at 14.9 percent of the population (figure, below left). Undernourishment in the world is unacceptable high.

The updated figures emerging as a result of improvements in data and the methodology FAO uses to calculate its undernourishment indicator suggest that the number of undernourished people in the world declined more steeply than previously estimated until 2007, although the rate of decline has slowed thereafter (figure, below left). As a result, the developing world as a whole is much closer to achieving the Millennium Development Goal (MDG) target of reducing by half the percentage of people suffering from chronic hunger by 2015. If the average annual decline of the past 20 years continues through to 2015, the prevalence of undernourishment in the developing country regions would reach 12.5 percent – still above the MDG target, but much closer to it than previously estimated.

Considerable differences among regions and individual countries remain, however. A reduction in both the number and proportion of undernourished in Asia observed in recent years has continued, resulting in Asia being roughly on track for achieving its MDG hunger target. The same holds true for Latin America, Africa, by contrast, is continuing its large and rising deviation away from what is needed to meet its target; the trend for progress in reducing undernourishment is broadly mirrored by those poverty and child mortality. In Western Asia also, the prevalence of undernourishment has progressively increased since 1990–92 (regional aggregations follow standard UN classification; a breakdown of country composition is provided in the annex to the report). As regions have differed in their rates of progress towards reducing hunger, the distribution of where hungry people are concentrated in the developing regions has changed over the past 20 years (figure, below right).

The shares of South-Eastern Asia and Eastern Asia in the developing regions’ undernourished people have seen the most marked decline between 1990–92 and 2010–12 (from 13.4 to 7.5 percent and from 26.1 to 19.2 percent, respectively), while that of Latin America also declined, from 6.5 to 5.6 percent. Meanwhile, the shares have increased from 32.7 to 35.0 percent in Southern Asia, from 17.0 to 27.0 percent in sub-Saharan Africa and from 1.3 to 2.9 percent in Western Asia and Northern Africa.

Undernourishment in recent years

The new estimates also suggest that the increase in hunger during 2007–10 – the period characterized by food price and economic crises – was less severe than previously estimated. There are several reasons for this. First, the FAO methodology estimates chronic undernourishment based on habitual consumption of dietary energy and does not capture the effects of price spikes, which are typically short-term. As a result, the prevalence should not be used to draw definitive conclusions about the effects of price spikes or other short-term shocks. Second, the transmission of economic shocks to many developing countries was less pronounced than initially thought. More recent GDP estimates suggest that the “great regression” of 2008–09 resulted in only a mild slowdown in many developing countries, and increases in domestic staple food prices were very small in China, India and Indonesia (the three largest developing countries).

However, even when higher prices cannot be directly linked to a reduction in the total amount of calories consumed by the population, higher food prices may nevertheless have had other negative impacts, for example a deterioration in the quality of the diet and reduced access to other basic needs such as health and education. Such impacts are difficult to quantify using information currently available in most countries, and certainly cannot be captured by an indicator based only on the adequacy of dietary energy. In an effort to fill this information gap, FAO has identified a preliminary set of more than 20 indicators, available for most countries and years. Data for these are available from the companion website for this report (www.fao.org/publications/softl/en) and will allow food security analysts and policy makers to assess more comprehensively the various dimensions and manifestations of food insecurity, and thus inform policy for more effective interventions and responses.

This year’s edition of The State of Food Insecurity in the World presents new estimates of the number and proportion of hungry people in the world going back to 1990, reflecting several key improvements in data and in the methodology used by FAO to derive its prevalence of undernourishment indicator (PUI). The new estimates incorporate:

- the latest revisions of world population data;
- new anthropometric data from demographic, health and household surveys that suggest revised minimum dietary energy requirements, by country;
- updated estimates of dietary energy supply, by country;
- country-specific estimates of food losses at the retail distribution level; and
- technical improvements to the methodology.

It should be noted that the current methodology does not capture the impact of short-term price and other economic shocks, unless these are reflected in changes in long-term food consumption patterns.

Undernourishment in 2010–12, by region (millions)

<table>
<thead>
<tr>
<th>Region</th>
<th>Total = 688 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oceania</td>
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<tr>
<td>Caucasus and Central Asia</td>
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<tr>
<td>Developed regions</td>
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<tr>
<td>Western Asia and Northern Africa</td>
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<tr>
<td>Latin America and the Caribbean</td>
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<td>Eastern Asia 167</td>
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<tr>
<td>Sub-Saharan Africa</td>
<td>234</td>
</tr>
<tr>
<td>Southern Asia</td>
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</tbody>
</table>

As incomes rise, dietary diversity increases

Economic growth – necessary but not sufficient to accelerate reduction of hunger and malnutrition

Progress in reducing undernourishment has slowed considerably since 2007, and strong economic growth will be an essential component for successful and sustainable hunger reduction. Indeed, regions that have grown more rapidly have generally witnessed more rapid reductions in hunger; throughout the world, people with more income have greater dietary diversity (see figure, below). During the past decade, per capita income growth was positive in all developing country regions, but in many countries growth did not significantly reduce hunger, suggesting that growth alone is unlikely to make a significant impact on hunger reduction.

Economic growth must involve and reach the poor through increased employment and other income-earning opportunities. Furthermore, women need to share in these opportunities. Economic growth is effective in reducing extreme poverty and hunger when it increases returns to labour and generates employment for the poor. Agriculture growth is particularly effective in reducing hunger and malnutrition.
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Improvements to the FAO hunger indicator

As incomes rise, dietary diversity increases

The revised results imply that the Millennium Development Goal (MDG) target of reducing by half the number of undernourished people (PoU) has progressively increased since 1990–92 (regional

Economically poor households, as compared to the highest income quintiles in developing countries, can benefit more from interventions that involve diversification of diets; improved access to safe drinking water and sanitation; improved access to technology adoption and economic growth. By reducing food price and other economic shocks, unless these are reflected in changes in long-term food consumption patterns.

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