



Undernourishment around the world: impact of the 2006–08 price shock

The crises hit the poor and the weak

Key message

Small import-dependent countries, especially in Africa, were deeply affected by the food and economic crises. Some large countries were able to insulate their markets from the crisis through restrictive trade policies and protect their consumers through safety nets. However, trade insulation increased prices and volatility in international markets.

The estimated impact of the price shock of 2006–08 on the number of undernourished varied markedly across regions and individual countries.¹ Different net trade positions (e.g. exporter, importer) and different policy responses to the price and income shocks held the key to the range of outcomes. The countries most exposed to price swings on international markets were typically poor and food importers: they had few reserves and inadequate budgetary

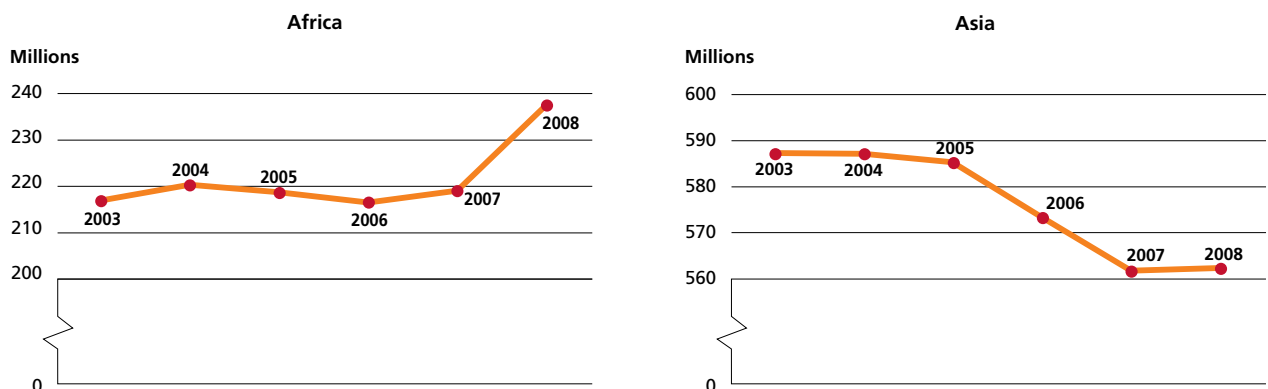
means to procure food at high prices; they also lacked the option of restricting exports. They had to bear the brunt of the crisis, and domestic staple food prices rose substantially in these countries. Most of these countries were in Africa, and Figure 1 captures these divergent trends in undernourishment in Africa and Asia. Between 2007 and 2008, the number of undernourished was essentially constant in Asia (an increase of 0.1 percent), while it increased by 8 percent in Africa.

Trade policies were an important determinant of outcomes – many countries imposed export restrictions or reduced import barriers. In addition to trade policies, releasing public stocks and providing consumer subsidies were among the most common measures adopted as countries sought to contain the problem of rising food prices.²

Broadly speaking, three main groups of countries emerged, distinguished by their ability to limit the price shock or mitigate its effects. These are shown in Figure 2, which depicts the experiences of countries along two dimensions: the percentage change in real domestic food prices from 2007 to

FIGURE 1

Undernourishment in the world: two very different trends after the crises



Source: FAO.

2008 and the percentage change in the number of undernourished from 2006–07 to 2009. The first group had relatively small domestic price increases from 2007 to 2008, coupled with progress in reducing undernourishment. These countries are located towards the lower left of the figure. The second group, located towards the upper left of the figure, had relatively large domestic price increases, but made progress in reducing undernourishment. Finally, the third group also had relatively large domestic price increases, but witnessed increases in undernourishment. These countries are located in the upper right of the figure.

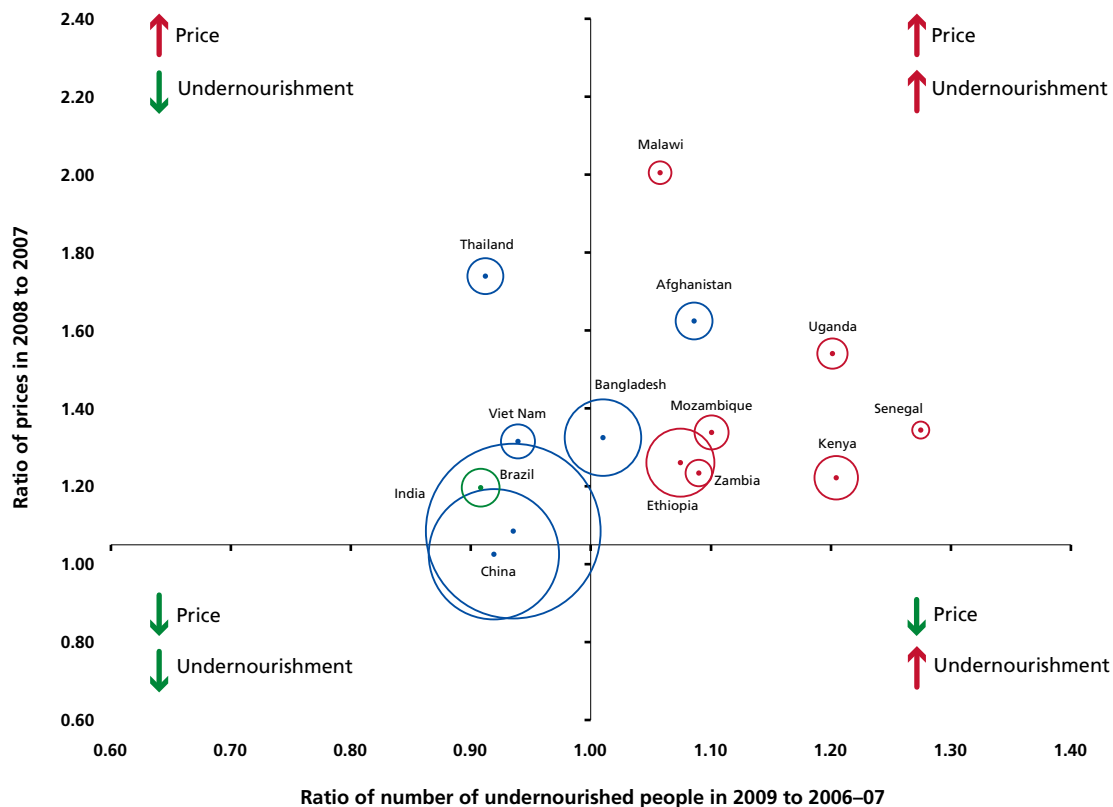
The first group of countries used a combination of trade restrictions, safety nets and stock releases. This allowed them to shelter their food markets from the international turbulence, but the effectiveness of such policies is dependent upon having the necessary resources to implement them. Inclusive safety net programmes (such as those in Brazil) imply expenditures that many countries may not be able to afford, especially during a crisis. Export restrictions result in a loss of

government revenue and reduce the potential for farmers to gain by increasing their production in response to higher prices. And food stocks are expensive to hold, meaning that poor countries may not have had the stocks available before the crisis to compensate for any domestic production shortfalls. This first group of countries, including China and India, cluster in the lower left hand part of Figure 2. Unfortunately, the export restrictions exacerbated price increases in international markets and compounded the impacts of food shortages in import-dependent countries.

The second group benefited from higher prices as the majority of the poor in these countries are net food sellers. Their incomes generally rose with higher prices even if some of the profits were partially reduced by higher prices for inputs such as fertilizer, seeds or fuel. These countries are often net food exporters with a relatively equal distribution of land (which means there are more farmers with a surplus to sell). This group of countries, including Thailand and Viet Nam, tend to be in the upper left hand part of Figure 2.

FIGURE 2

Differences in resilience to food price shocks across countries



Notes: The size of the bubbles is proportional to the number of undernourished in 2008. African countries are shown in red, Asian countries in blue and Latin American countries in green. Prices used are inflation-adjusted retail prices of major staple foods in main markets, weighted by the population of each market and the share in energy intake of each staple food. Source of raw data: FAO.

The third group comprises countries that generally depend on food imports. They were exposed to higher international prices for food commodities, were typically without sufficient stocks, and did not have the budgetary resources to adequately protect the food security of the poor. These countries bore the brunt of the crisis (see countries towards the top right of Figure 2). Many of them imported far less on a commercial basis than was needed due to a shortage of foreign exchange, and were forced to appeal for external assistance and food aid. The Government of Burkina Faso, for

example, implemented subsidized sales of grain but was forced to rely on WFP to assist 600 000 beneficiaries (through school feeding and mother and child health centres) in 2008. The Ethiopian Government sold about 190 000 tonnes of wheat from its grain reserve to about 800 000 urban poor and imported 150 000 tonnes of wheat in August/September 2008 to meet demand in urban areas, while WFP and non-governmental organizations channelled about 200 000 tonnes of food to the increasing number of people requiring food assistance.



Revising FAO's methodology for measuring hunger

During its meeting in 2010, the Committee on World Food Security (CFS) asked FAO to review its methodology for estimating undernourishment in order to provide more timely updates and incorporate all relevant information, including analysis of the large number of household surveys that have become available in recent years. Thus, this year is one of transition while the FAO methodology is being revised. Therefore, no updated estimates for the number of undernourished people in 2009 and 2010 are reported in this year's *State of Food Insecurity in the World*, nor has an estimate been made for 2011.

In order to improve its methodology, FAO will make several adjustments, including in the estimation of how changes in food access due to changes in income and food prices affect undernourishment. Work is also underway to improve the construction of food balance sheets. A large

number of household expenditure surveys are being processed to provide improved estimates of the distribution of food consumption within a country. FAO's measures of undernourishment will also be complemented with a number of other indicators intended to better capture the multi-faceted nature of food insecurity.

The process of revising FAO's methodology involves consultations with experts from around the world. The United States National Academy of Sciences held a workshop in February 2011 in Washington DC that provided many suggestions, as did a round table sponsored by the CFS held in Rome in September 2011. In addition, an International Scientific Symposium will be held in January 2012 in Rome. FAO considers such consultations essential for further improving the methodology used for the measurement of hunger.