HIGHLIGHTS from CHAPTER 4:
POVERTY IMPACT OF FOOD PRICE SHOCKS AND POLICIES

Key Points

- While agricultural and food prices are expected to rise only moderately in 2019, risks of extreme weather, an escalation of trade tensions, or a jump in energy prices could trigger higher prices.
- Trade policies aimed at insulating domestic food markets can increase the volatility of world food prices. They may have accounted for 40 percent of the increase in the world price of wheat and one-quarter of the increase in the world price of maize during the 2010-11 food price spike.
- Combined with government policy responses, the 2010-11 food price spike increased global poverty by almost 1 percent or 8.3 million people.

Vulnerability to food price spikes. A high share of agriculture and food in total output, consumption, employment, trade, and government revenues heighten countries’ vulnerability to volatility in international food prices. Low-income countries (LICs) are particularly susceptible, as agriculture in these countries accounts for close to one-third of value added and two-thirds of total employment, nearly three times their shares in EMDEs. A high share of net food buyers among the poorest segments of society heightens the adverse effects of food price spikes on poverty and income distribution. In LICs, most households are net buyers of food which spend on average close to 60 percent of their income on food, more than one-third more than in EMDEs.

Government interventions. In the event of large swings in world food prices, governments often intervene to dampen the transmission of changes in world prices into domestic markets and lessen the burden on vulnerable population groups. To the extent that policy interventions reduce the transmission of international price spikes to domestic markets, they may appear to be successful for individual countries. However, the combined intervention of many countries tends to exacerbate the volatility and the increase in world prices. Insulating policies introduced during the 2010-11 food price spike may have accounted for 40 percent of the increase in the world price of wheat and one-quarter of the increase in the world price of maize.

Poverty implications. The 2010-11 food price spike raised poverty in most countries, despite widespread government intervention. The number of extreme poor increased by 8.3 million, or almost 1 percent. Combined with government intervention, the increase in world food prices was most strongly felt in countries where the extreme poor tend to be net food-buyers whose real incomes declined.

Alternative policy responses. Targeted safety net interventions such as cash transfers, food and in-kind transfers etc. can mitigate the negative impact of food price shocks while reducing the economy-wide distortionary impacts of trade policies. Additional measures such as crop and weather insurance, warehouse receipt systems, commodity exchanges and futures markets could also be used as risk management instruments.
Figure 1. Poverty impact of food price shocks and policies

Although food prices have declined considerably since the 2010-11 food price spike, in real terms, they are still significantly above their lows in 2000. Insulating policies introduced during the 2010-11 food price spike accounted for 40 percent of the increase in the world price of wheat and one-quarter of the increase in the world price of maize. Combined with government policy responses, the 2010-11 food price spike increased global poverty by almost 1 percent or 8.3 million.

A. Global food prices

B. Share of food in total consumption expenditure

C. Increase in world prices, 2010-11

D. Global poverty impact of the 2010-11 food price spike

Source: Ag-Incentives Database, World Bank.
A. Based on annual commodity price indexes, deflated using the World Bank manufactures unit value index.
B. Based on data from the Global Consumption Database reflecting on the share of food in total consumption expenditure of households. Data is based on 63 non-LIC EMDEs and 25 LICs. The base year of the household surveys differs but the data has been converted to a common reference year, 2010.
C. Real terms based on weighted averages. Estimates derived based on the methodology described in Annex 4.2.1. Active policies refer to trade policy interventions such as import tariffs or subsidies, export taxes or subsidies and export bans. The increase in world prices “with active policies” represents the observed increase in the world price of these respective commodities during 2010-11. The increase in world prices “without active policies” is a counterfactual scenario calculated to remove the weighted average of trade policy interventions in each country, where the weights are the share of each country in global supply and demand, and taking into account the responsiveness of production and consumption in these countries.
D. Based on estimates using the computable general equilibrium model MIRAGRODEP, described in detail in Annex 4.2.1. Assuming increases in the price of maize, rice, and wheat, as represented in panel C "with active policies" and based on a poverty line of $1.90/day purchasing power parity.