

## Summary

Growth in India's economy and consumer buying power has accelerated sharply since the early 1990s, when a balance-of-payments crisis instigated major liberalizing reforms to exchange rate, trade, and domestic regulatory policies. As a result, India's food demand is expanding and diversifying, but India's farm sector has not shared in the benefits of policy reform, and growth in the sector has remained sluggish. Because the farm sector accounts for a large share of total output and employment in the Indian economy, this poor performance raises concerns about India's ability to sustain accelerated income growth, reduce pervasive rural poverty, and maintain food security.

### *What Is the Issue?*

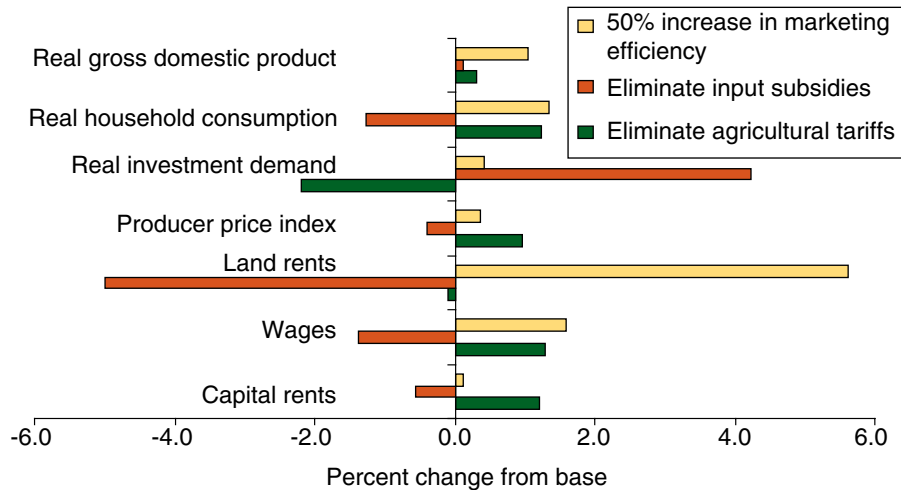
Despite the recent robust expansion of India's economy, lagging investment and growth in its agricultural sector are raising concerns about the need for a second round of reforms to stimulate the farm economy. Reforms of agricultural trade protection and producer subsidies are frequent topics of discussion and analysis, but strong evidence supports the idea that fragmented and inefficient domestic agricultural marketing chains seriously hinder agricultural competitiveness and growth. Measures to boost marketing efficiency by reducing regulatory barriers that have impeded investment in agricultural wholesale and retail trade services may also improve conditions for low-income producers and consumers, a priority for India's policymakers. This study examines the performance of India's agricultural marketing system and analyzes the economywide implications of improved marketing efficiency that might stem from future reforms to domestic market regulations and increased investment in agricultural markets.

### *What Are the Major Findings?*

Measures to improve agricultural marketing efficiency in India can substantially and broadly benefit India's economy. Improved marketing efficiency has the potential to generate economywide gains in output and wages, raise agricultural producer prices, reduce consumer food prices, and increase private consumption, particularly by rural and low-income households.

The broad gains from improving agricultural marketing efficiency contrast significantly with the impacts of reducing agricultural subsidies and tariffs. Indian policymakers face domestic and international pressures to reduce input subsidies and tariffs in the farm sector. But reducing subsidies and tariffs, while conferring economywide benefits, may also, at least in the medium term, create adjustment costs for labor, land, and capital markets, some commodity sectors, and households. In contrast, improved agricultural marketing efficiency can benefit the overall economy (see chart), as well as low-income households. The results of this study suggest that policy measures to improve the efficiency of domestic agricultural markets may be a valuable complement to subsidy and tariff reforms by helping to mitigate the medium-term losses that may stem from such reforms.

## Economywide effects of alternative agricultural and food marketing policy scenarios in India



Greater investment and efficiency in India’s agricultural supply chains also have the potential to enhance agricultural growth over the longer term. Whether new policies lead to rapid investment by modern retailers and others in transforming India’s markets or the process occurs gradually, more efficient agricultural marketing is likely to strengthen consumer demand for food and other goods. More efficient domestic marketing may also boost net agricultural exports, although this result does not account for the changes in demand likely to occur as higher income growth is sustained over the longer term or for constraints on crop and livestock production that may emerge.

This analysis also does not fully assess the adjustment costs, including potential employment and income losses in some areas of the traditional marketing system, that might result from transforming India’s traditional wholesale and retail markets into a more efficient sector. This transformation could lead to fewer, but larger, vertically integrated, and more technologically advanced processing and marketing enterprises. Concerns with managing these adjustment costs are central to the current debate over regulating direct foreign investment in food retailing in India. This analysis suggests, however, that although some participants in the traditional marketing system would undoubtedly face adjustment costs, the impacts on economywide wages and welfare, as well as the welfare impacts on low-income households, are positive.

For the United States, these results suggest that increasing investment and efficiency in India’s agricultural markets is an important potential driver of broad-based income and demand growth in India, likely bringing long-term benefits to its trade partners. The analysis of the potential impacts of reforms to agricultural input subsidies and tariffs suggests why these issues are sensitive for India in bilateral and multilateral negotiations. At least in the medium term, reducing input subsidies lowers output of food staples, leading to reduced welfare for low-income households, while reducing tariffs imposes adjustment costs on protected commodity sectors. But, the results also suggest that measures to improve agricultural marketing efficiency, perhaps including cooperation to strengthen India’s market institutions and investment climate, can help mitigate the adjustment costs faced

by some households and commodity sectors from such reforms. Further, the substantial increases in agricultural output and food consumption that arise from improved marketing efficiency in this analysis suggest the potential for positive returns to private investment—including U.S. private foreign investment—in Indian agribusiness.

### *How Was the Study Conducted?*

The authors constructed a computable general equilibrium (CGE) model of the Indian economy. The basic model structure was developed by the International Food Policy Research Institute (IFPRI), with expanded commodity coverage, disaggregation of marketing and trade costs, disaggregation of rural and urban households by expenditure class, and other extensions added by the authors for this study. Model data were supplied by the Global Trade Analysis Project (GTAP) and official Indian sources. Model structure, extensions, and data sources are described in detail in an appendix. The study also draws on data and results from studies of India's agricultural markets conducted recently by ERS, the World Bank, and other institutions.