

## Introduction

Growth in India's real income 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. But, despite the resulting expansion and diversification of food demand, growth in India's farm sector has been slowing. Because the farm sector accounts for large shares of total output and employment in the Indian economy, this poor performance raises concerns about progress in reducing pervasive rural poverty, the sustainability of India's higher growth path, and the maintenance of food security. The successful reforms of the early 1990s enhanced the competitiveness and growth of India's manufacturing and service sectors, but political consensus on a "second round" of reforms to stimulate the rural sector and more directly address the needs of India's rural and urban poor has remained elusive. A major package of credit concessions and outlays for agriculture announced in the 2008/09 government budget—in advance of national elections in early 2009—was evidence of continued concern with farm sector performance.

The government has been and continues to be heavily involved in India's agricultural sector through policy interventions in the production, marketing, and trade of most major farm commodities. Most obvious—and most studied—have been India's border measures, including relatively high bound and applied tariffs and export controls for farm products, and its burgeoning subsidies on farm inputs and on producer and consumer prices of wheat and rice.<sup>1</sup> Less obvious—and less studied—are India's extensive array of central and state regulations that affect the movement, storage, processing, and marketing of farm commodities and that have served as disincentives for private investment in agricultural wholesale and retail marketing. As a result, India's agricultural marketing system consists primarily of small-scale, nonintegrated, and inefficient marketing enterprises that tax both producers and consumers of farm products (Landes, 2008; Landes and Gulati, 2004).

A small but growing body of research on India's agricultural wholesale and retail markets has identified a range of developments that are increasing or could increase efficiency in the supply chains that move agricultural products from producers to consumers. Vertical integration,<sup>2</sup> led by the private sector, has significantly reduced marketing costs, reduced consumer prices, increased grower returns, and stimulated growth in India's broiler industry (Landes et al., 2004). Reducing the government's role in marketing wheat by fully decentralizing and privatizing procurement for government distribution programs could reduce producer wholesale markups for wheat, as well as sharply lower budgetary costs (Jha et al., 2007). Deregulating oilseed marketing and processing, which would allow the import of oilseeds, could improve efficiency in India's oilseed-processing industry and reduce consumer prices of edible oil while maintaining incentives for oilseed producers (Persaud and Landes, 2006; World Bank, 1997). Joseph et al. (2008) have recommended a package of reforms needed to improve the competitiveness and efficiency of India's agricultural supply chains, including the promotion of retailer cooperatives and associations to procure directly from farmers, developing professional standards and product branding, improving credit and banking services, and simplifying regulatory and licensing requirements in the marketing chain.

<sup>1</sup>A bound tariff is the maximum tariff rate allowed by the World Trade Organization. An applied tariff is the actual tariff rate in effect at a country's border.

<sup>2</sup>One business controls or owns different aspects of buying, processing, selling, and delivering products and services.

The widespread underinvestment and inefficiency in India's agricultural marketing system, coupled with the high priority given to boosting agricultural growth, makes it important to explore the potential impacts of improvements in marketing efficiency that may occur as a result of reduced regulation and increased investment in domestic markets. This study reviews and builds on industry studies of agricultural marketing efficiency to provide an economywide assessment of the impacts of potential increases in marketing efficiency. The analysis uses a computable general equilibrium (CGE) model to estimate the effects of increased agricultural marketing efficiency on economywide production, consumption, prices, and welfare. Because the equity implications of policy reform are a key consideration for Indian policymakers, the framework also accounts for the distribution of impacts on 10 representative household types classified by rural and urban location and by income class. The impacts of increased marketing efficiency are then contrasted with those for two controversial and more commonly addressed areas of agricultural reform: liberalization of agricultural trade and removal of agricultural input subsidies.

The results indicate that, when marketing costs are reduced, impacts include higher agricultural producer prices, lower consumer food prices, and increased real consumption for all households—high and low income, rural and urban. Increasing the efficiency of agricultural marketing tends to have greater positive impacts on consumers and producers—particularly on lower income households—than do other more “traditional” reforms, such as reducing agricultural input subsidies or removing barriers to agricultural trade. A key implication is that measures to improve marketing efficiency offer a potentially valuable complement to agricultural subsidy and trade reforms.