Research Paper

Volume : 4 | Issue : 4 | April 2015 • ISSN No 2277 - 8179

Agricultural Marketing Efficiency in India: A View

MANAGEMENT

KEYWORDS :

S. Senguttuvan

Assistant Professor and Ph.D Research Scholar, Department of Management, PSV College of Engineering and Technology, Krishnagiri

ABSTRACT

[Agriculture is the largest source of employment in India, and food accounts for about half of consumer expenditures. Moving agricultural products from the farm to consumers more efficiently could result in large gains to producers, consumers, and India's overall economy. This analysis uses a computable general equilibrium model with agricultural commodity detail and households disaggregated by rural, urban, and income class to study the potential impacts of reforms that achieve efficiency gains in agricultural marketing and reduce agricultural input subsidies and import tariffs. More efficient agricultural marketing generates economy wide gains in output and wages, raises agricultural producer prices, reduces consumer food prices, and increases private consumption, particularly by low-income households. These gains could help to offset some of the medium-term adjustment costs for some commodity markets and households associated with reducing agricultural subsidies and tariffs.]

1.1 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. 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.

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, led by the private sector, has significantly reduced marketing costs, reduced consumer prices, increased grower returns, and stimulated growth in India's broiler industry. 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. 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 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.

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. Therefore this paper examines the Growth and Equity Effects of Agricultural Marketing Efficiency in India.

1.2 Agricultural Policy, Investment, and Marketing Efficiency in India

Marketing services are the wholesale and retail trade services used to bring domestically produced goods from the producer to the point of sale for intermediate and final demand. In India's agricultural and food markets, the marketing chain typically consists of a primary market where farmers sell their product, wholesale markets where wholesalers who purchase from primary markets sell to processors and retailers, and retail markets where retailers sell to consumers. In many cases, additional intermediaries may be present in supply chains, including village collectors who purchase from farmers and sell in primary markets or sub wholesalers who operate between wholesalers and retailers. Many, if not most, of the intermediaries in India's agricultural supply chains are small-scale, nonintegrated marketing enterprises operating in the "unorganized" sector, for which little official data are available.

Inefficient marketing systems tax producers by placing downward pressure on farm gate prices and tax consumers by raising retail prices, thus representing a potentially important target for reform. In India, agriculture accounts for about 18 percent of gross domestic product (GDP) and 58 percent of employment, and food accounts for about 47 percent of consumer expenditure. Thus, in India, like other developing countries, the economy wide impacts of improved marketing efficiency on food demand, output, and trade are potentially larger than in more developed countries where agriculture and food account for smaller shares of the economy. Improved performance of agricultural marketing may also have desirable equity outcomes by reducing food costs for low-income rural and urban consumers,

who tend to allocate the largest budget shares for food.

The significance of high marketing costs as a tax on farm output is evident in studies that have quantified government intervention in Indian agriculture, in which the combination of trade restrictions and high marketing costs often result in producer prices below import parity prices for many of India's major farm commodities. There is also strong evidence that an array of central and state government policies have tended to undermine incentives for private investment by farmers and agribusinesses. These policies may have contributed to an inefficient marketing system characterized by small-scale, nonintegrated marketing service enterprises. These policy measures include the following:

Movement, storage, and pricing restrictions on food commodities:
The Essential Commodities Act allows central and state governments to administratively impose movement, storage, pricing, and quality restrictions on most food commodities. These restrictions are a major source of policy risk for agribusiness investment, particularly in larger scale firms that hold relatively large stocks or operate across state borders.

Agricultural marketing restrictions:
State agricultural marketing laws have historically required all farm produce to be sold in government regulated markets and prohibited private investment in markets and vertical coordination or integration between agribusinesses and farmers. These rules are now in the process of reform but with full implementation in just a few states. Government-regulated markets continue to dominate agricultural marketing in most of the country.

Land tenure policies:

In addition to ceilings on land ownership, many states either prohibit farm land rental or provide insufficient legal protections to either party to a rental agreement to support an active rental market. These policies impede formation of larger operational holdings and farmer access to investment credit and complicate vertical coordination between growers, processors, and traders.

Scale limitations on agricultural processing firms:
Until the late 1990s, most agricultural processors were required to be "small-scale industries," restricted to fixed capital assets of no more than 10 million rupees (Rs) (about $247,000). Although most scale restrictions have been removed, agricultural marketing and processing remain dominated by small-scale firms.

Credit policies:
The high cost and limited availability of credit likely restricted new investment in agriculture and agribusiness during the 1990s. Terms and availability for institutional credit have improved significantly since 2000, but a large share of farmers and agribusinesses still depend on high-cost credit from traditional moneylenders.

Tax policies:
Until 2000, high excise tax rates of 8-16 percent on most processed agricultural products raised costs and deterred investment in food processing. These tax rates have been reduced sharply since 2001.

This policy environment, although changing since the late 1990s, has continued to be unfriendly to private investment in agricultural marketing and processing firms, particularly larger, integrated agribusinesses, and has corresponded with sluggish investment in Indian agriculture and agribusiness. During 2003-05, the share of investment in India's GDP was 27 percent for the economy as a whole. The share of agricultural investment in agricultural GDP was just 6 percent for investment in production agriculture and 15 percent for investment in production agriculture and agricultural marketing infrastructure (fig. 1).3 Further, while total investment in the Indian economy has been accelerating and grew about 6.5 percent annually in real terms during 1997-2004, investment in agriculture has been slowing and grew just 2.2 percent annually during the same period. Additional evidence of the low levels of investment in Indian agribusiness includes the following:

- Although more than 90 percent of India's food grains receive primary processing, mostly in medium- or small-scale mills, relatively small shares of other food products are processed. About 2.2 percent of fruit and vegetable production receives any processing, about 35 percent of milk is processed (mostly as packaged fluid milk), and between 6 and 21 percent of poultry and meat is processed. The scale of most of India's soybean-processing plants is in the range of 170 tons/day, far below the average capacity of U.S. plants (2,700 tons/day) and the even larger average capacity of new plants in Brazil and Argentina.
- Only 1-2 percent of food products are sold through modern chain retail establishments. The strong expansion of consumer food demand, along with improved national tax and credit conditions and implementation of agricultural marketing reform in some states, has improved the climate for investment in Indian agriculture since 2001. There is evidence of increased investment in modern food retailing by domestic and multinational firms. Findings from research on Indian agricultural markets indicate that these new private-sector initiatives could significantly improve marketing efficiency:
- Vertical integration in India's broiler industry is improving efficiency in production and, particularly, marketing. Variable production costs averaged 10 percent lower and producer-to-retail marketing margins 60 percent lower in regions where vertical integration accounted for the largest shares of production.
- Domestic markets for wheat and rice are inefficient because of large numbers of intermediaries, high physical losses, and disincentives for private investment. The average producertoretail markup for unprocessed, ungraded, bulk wheat is estimated at 52 percent of the producer price in the private sector, with the producer-to wholesale markup for the public-sector Food Corporation of India (FCI) estimated at 51 percent of the producer price. Reducing the role of the FCI and increased investment by the private sector has the potential to increase marketing efficiency and reduce costs.
- Oilseed and product marketing costs in India are inflated because the scale, technology, and capacity utilization rates of oilseed-processing plants are well below international standards. Efficiency gains associated with deregulation of marketing and processing of India's major oilseeds have been estimated at 22-44 percent.
- The efficiency of India's horticultural product markets is impeded by high logistical costs, produce wastage rates of 20-40 percent, and low domestic quality standards. Indian growers, on average, receive 12-15 percent of the retail price of horticultural produce, compared with 30-40 percent in the United States, despite the little value that is added in the Indian market.

1.3 Potential Implications of Marketing Efficiency Gains
The relatively low levels of efficiency in India's agricultural marketing chains tax the output of Indian producers and the consumption of Indian consumers, but also offer a potential source of improved agricultural competitiveness and income growth over the longer term. Deregulation of agricultural markets, such as removal of private movement and storage restrictions, can benefit both producers and consumers by improving incentives

Volume : 4 | Issue : 4 | April 2015 • ISSN No 2277 - 8179

for private investment in market infrastructure, new technology, and more efficient horizontally or vertically integrated agribusinesses. Producers stand to gain when improved marketing efficiency increases demand and prices for their products. Consumers can gain if more efficient wholesale and retail trade services reduce consumer prices. The net effect of improvements in marketing efficiency on agricultural producer prices is, however, not clear cut. For producers, an efficiency induced fall in the retail cost of food should increase quantity demanded and create upward pressure on producer prices. At the same time, this price increase could be offset by declines in producer prices as gains in marketing efficiency reduce the prices of intermediate agricultural inputs and therefore lower the costs of production. For consumers, purchase price declines associated with more efficient marketing could be offset by upward price pressure from increased quantity demanded, particularly if demand is highly responsive to changes in price (price-elastic demand) and/or expanding supply through production or trade is inhibited by technical or resource constraints (price-inelastic supply). Across commodity sectors, marketing efficiency gains are likely to affect prices, output, and demand differently, depending on the sectors' use of marketing services and potential for efficiency gains The total or economy wide—impacts of increasing the efficiency of agricultural and food marketing may be substantial in a developing country like India because the agricultural sector accounts for a large share of economic activity and food accounts for a large share of household budget expenditures. Gains in farm output associated with higher farm prices may significantly affect aggregate supply of agricultural goods as well as all other goods and services and agricultural trade. Lower food prices for consumers can lead to potentially large economy wide changes in consumption expenditures for food and other goods and in household savings and investment.

1.4 Conclusion

In addition to the potential for important impacts on aggregate production, consumption, and investment, more efficient agricultural and food marketing services also have the potential to benefit low-income consumers in particular. The distribution of benefits across income groups depends on differences in food budget shares across low- and high-income households, whether their food basket is composed of commodities associated with more or less use of marketing services, and differences in household income sources. A relatively large number of India's poorest households are in rural areas, spend a relatively large share of income on food, and earn most of their income as either farmers or farm laborers. To the extent that improved marketing efficiency boosts farm prices and farm output, net sellers of food tend to gain. All net buyers of food tend to gain as consumer prices of food fall and labor demand and wages rise. Lower income rural and urban households, which tend to allocate the largest shares of income to food and depend on wage income, stand to benefit more from marketing efficiency gains than higher income households. However, higher income households can also benefit from more efficient food marketing because they tend to purchase more of the types of foods associated with intensive use of marketing services, such as processed or retail convenience foods.

REFERENCE

1. Arndt, C., H.T. Jensen, S.Robinson, and F. Tarp. 1999. Marketing Margins and Agricultural Technology in Mozambique, TMD Discussion Paper No. 43, Trade and Macroeconomics Division, International Food Policy Research Institute, Washington, DC. | 2. Gandhi, V., and A.Koshy. 2007. Wheat Marketing In India: Systems, Efficiency, and Integration, unpublished manuscript, Indian Institute of Management, Ahmedabad, India, October. | 3. Gulati, A., and S. Narayanan. 2003. The Subsidy Syndrome in Indian Agriculture, New Delhi: Oxford University Press. | 4. Jha, S., P.V. Srinivasan, and M. Landes. 2007. Indian Wheat and Rice Sector Policies and the Implications of Reform, Economic Research Report No.41, U.S. Department of Agriculture, Economic Research Service, May. | 5. Joseph, M., N. Soundararajan, M. Gupta, and S. Sahu. 2008. Impact of Organized Retailing on the Unorganized Sector, Indian Council for Research on International Economic Relations, New Delhi | 6. Landes, M. 2008. The Environment for Agricultural and Agribusiness Investment in India, Economic Information Bulletin No. 37, U.S.Department of Agriculture, Economic Research Service, July. | 7. Landes, M., and A. Gulati. 2004. "Farm Sector Performance and Reform Agenda," Economic and Political Weekly (Mumbai) 39(32):3611-19, August 7-13. | 8. Landes, M., S. Persaud, and J. Dyck. 2004. India's Poultry Sector: Development and Prospects, Outlook Report No. WRS04-03, U.S.Department of Agriculture, Economic Research Service, February. | 9. Matoo, A., D. Mishra, and A. Narain. 2007. From Competition at Home to Competing Abroad: A Case Study of India's Horticulture, New Delhi:Oxford University Press. | 10. McDonald, S., and K. Thierfelder. 2004. Deriving a Global Social Accounting Matrix from GTAP Versions 5 and 6 Data, GTAP TechnicalPaper No. 22, Purdue University, West Lafayette, IN. | 11. Mukherjee, A., and N. Patel. 2005. FDI in Retail Sector India, Academic Foundation, New Delhi. | 12. Mullen, K., D. Orden, and A. Gulati. 2005. Agricultural Policies in India:Producer Support Estimates 1985-2002, Discussion Paper No. 82,International Food and Policy Research Institute, Washington, DC. | 13. Persaud, S., and M. Landes. 2006. The Role of Policy and Industry Structure in India's Oilseed Markets, Economic Research Report No. 17, U.S.Department of Agriculture, Economic Research Service, April. | 14. Polaski, S., A. Ganesh-Kumar, S. McDonald, M. Panda, and S. Robinson.2008. India's Trade Policy Choices: Managing Diverse Challenges,Carnegie Endowment for International Peace, Washington, DC. | 15. Pradhan, B.K., and P.K. Roy. 2003. The Well Being of Indian Households:MIMAP – India Survey Report, New Delhi: Tata McGraw Hill. | 16. Reca, A. 2003. "Competition, Economies of Scale, and Product Differentiation," 2003 U.S. Food & Agribusiness Outlook, pp, 22-27, Rabobank International and Sparks Companies, Inc., September. |