

# Supermarket procurement and farmgate prices in India

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## Abstract

Supermarkets have gained in importance in the food systems of many developing countries, with profound implications for smallholder farmers. Several studies analyzed effects of selling to supermarkets on smallholder productivity and income. However, no previous work systematically analyzed effects of supermarkets on farmgate prices, even though prices are important determinants of farmers' profits and livelihoods. Here, we use data from smallholder vegetable growers in India to compare output prices received in supermarket and traditional market channels. We also quantify farmers' transport and transaction costs in both channels. Even after controlling for quality differences, prices are significantly higher in supermarket channels. Positive price effects are confirmed through hedonic price models and propensity score matching. Average effects of supermarkets on farmgate prices are in a magnitude of 20% or more. Higher farmgate prices are due to fewer intermediaries and lower transaction costs in supermarket channels. In the absence of binding contracts, supermarkets also need to pay higher prices to ensure regular supply of high-quality vegetables. These results suggest that the rise of supermarkets can contribute to increased market efficiency with positive effects on farmgate prices and revenues.

Keywords: Supermarkets, Small-scale farmers, Hedonic price models, Transaction costs, India

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