

United States  
Department of  
Agriculture



Economic  
Research  
Service

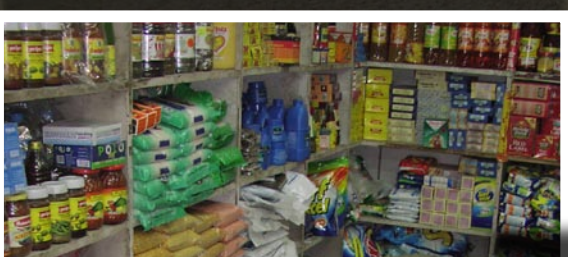
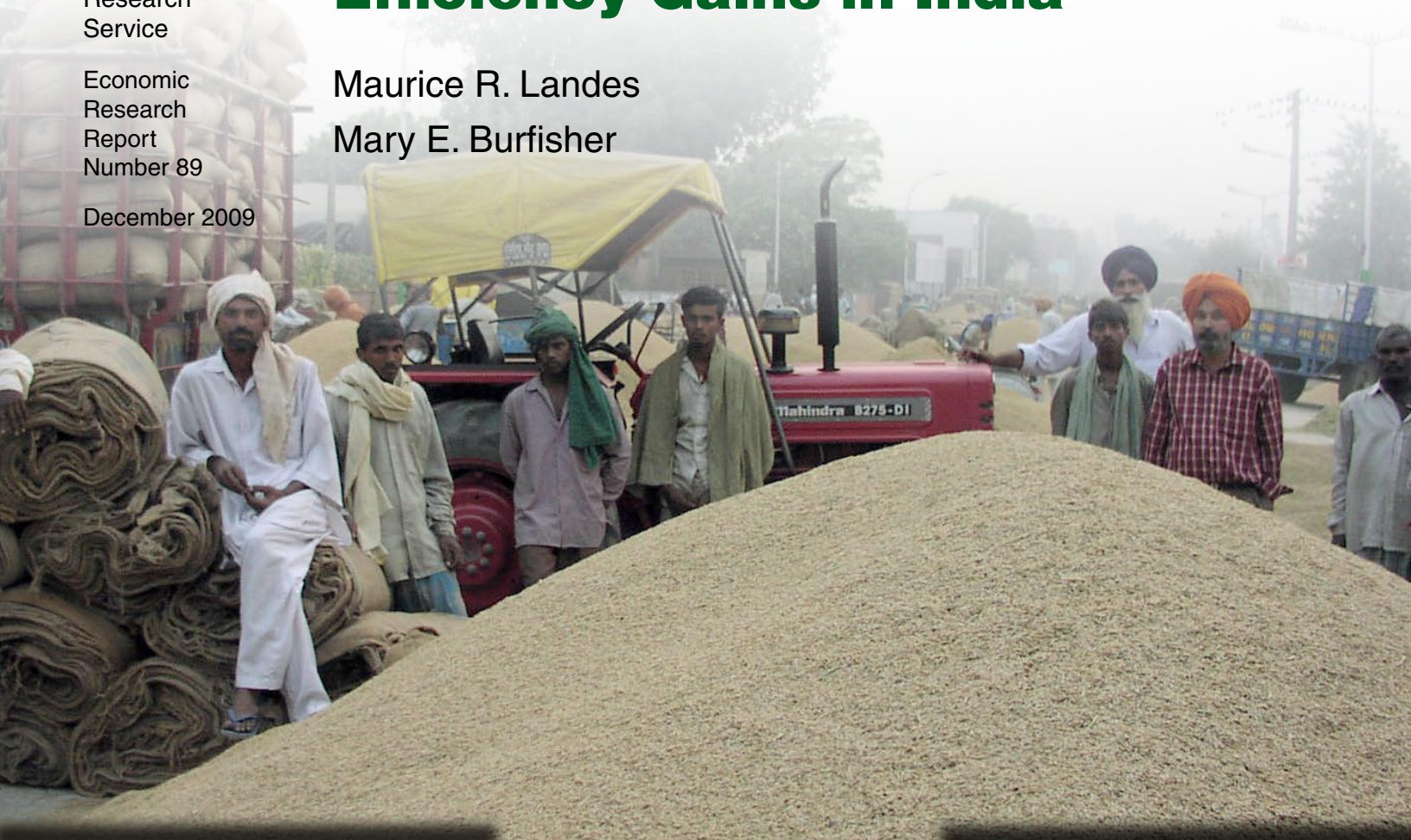
Economic  
Research  
Report  
Number 89

December 2009

# Growth and Equity Effects of Agricultural Marketing Efficiency Gains in India

Maurice R. Landes

Mary E. Burfisher



[www.ers.usda.gov](http://www.ers.usda.gov)

**Visit Our Website To Learn More!**

**India**

[www.ers.usda.gov/Briefing/India/](http://www.ers.usda.gov/Briefing/India/)

## **National Agricultural Library Cataloging Record:**

Landes, Maurice

Growth and equity effects of agricultural marketing efficiency gains in India.

(Economic research report (United States. Dept. of Agriculture. Economic Research Service) ; no. 89)

1. Agriculture—India—Econometric models. 2. Agriculture-Economic aspects—India.

3. Agriculture and state—India. 4. Farm produce-Marketing-Government policy—India.

I. Burfisher, Mary E. II. United States. Dept. of Agriculture. Economic Research Service. III. Title.

HD9016.I42

Photos: Maurice R. Landes

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.



United States  
Department  
of Agriculture

Economic  
Research  
Report  
Number 89

December 2009



A Report from the Economic Research Service

[www.ers.usda.gov](http://www.ers.usda.gov)

# Growth and Equity Effects of Agricultural Marketing Efficiency Gains in India

**Maurice R. Landes**

**Mary E. Burfisher**

## 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 economywide 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.

**Keywords:** India, agriculture, policy reform, marketing efficiency, tariffs, subsidies, households, computable general equilibrium model.

## Acknowledgments

Roman Keeney (Purdue University), Ashok Gulati (International Food Policy Research Institute), Holly Higgins (USDA, Foreign Agricultural Service), and two anonymous reviewers provided valuable comments on earlier versions of this report. The authors thank Anita Regmi (USDA, Economic Research Service (ERS)) for coordinating the peer review of the report, Linda Hatcher (USDA, ERS) for editing the report, and Cynthia A. Ray (USDA, ERS) for graphics design and layout.

# Contents

**Summary** . . . . . iii

**Introduction** . . . . . 1

**Agricultural Policy, Investment, and Marketing Efficiency in India** . . 3

    Potential Implications of Marketing Efficiency Gains . . . . . 6

**Estimated Costs of Marketing Agricultural and Food Products**. . . . . 8

**Household Income and Expenditure Patterns** . . . . . 11

**Impacts of Potential Marketing Efficiency Gains**. . . . . 15

    Economywide Impacts . . . . . 15

    Agricultural Sector Impacts . . . . . 16

    Household Impacts: Income and Rural/Urban Distribution . . . . . 18

**Comparing the Impacts of Increased Marketing Efficiency With Agricultural Input Subsidy and Tariff Reform**. . . . . 19

    India’s Agricultural Subsidies. . . . . 19

    India’s Agricultural Tariffs . . . . . 20

    Scenario Comparisons. . . . . 22

**Conclusions** . . . . . 25

**References** . . . . . 27

**Appendix 1: Model and Database** . . . . . 30

**Appendix 2: Sector Aggregation From GTAP Database; Mapping GTAP Data Into the India SAM** . . . . . 33

**Appendix 3: Scenario Results for Impacts of Agricultural Marketing Efficiency, Input Subsidy, and Tariff Reform Scenarios in India**. . . . 34

**Recommended citation format for this publication:**

Landes, Maurice R., and Mary E. Burfisher. *Growth and Equity Effects of Agricultural Marketing Efficiency Gains in India*. ERR-89. U.S. Dept. of Agriculture, Econ. Res. Serv. November 2009.