



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*



---

## Asia Goes Shopping: Do Transportation and Infrastructure Matter?

USDA Agricultural Outlook Forum 2003  
*Crystal Gateway Marriott Hotel*  
*Arlington, Virginia*

*February 21, 2003*

*William Coyle*  
*ERS, USDA*

---

# Outline

---

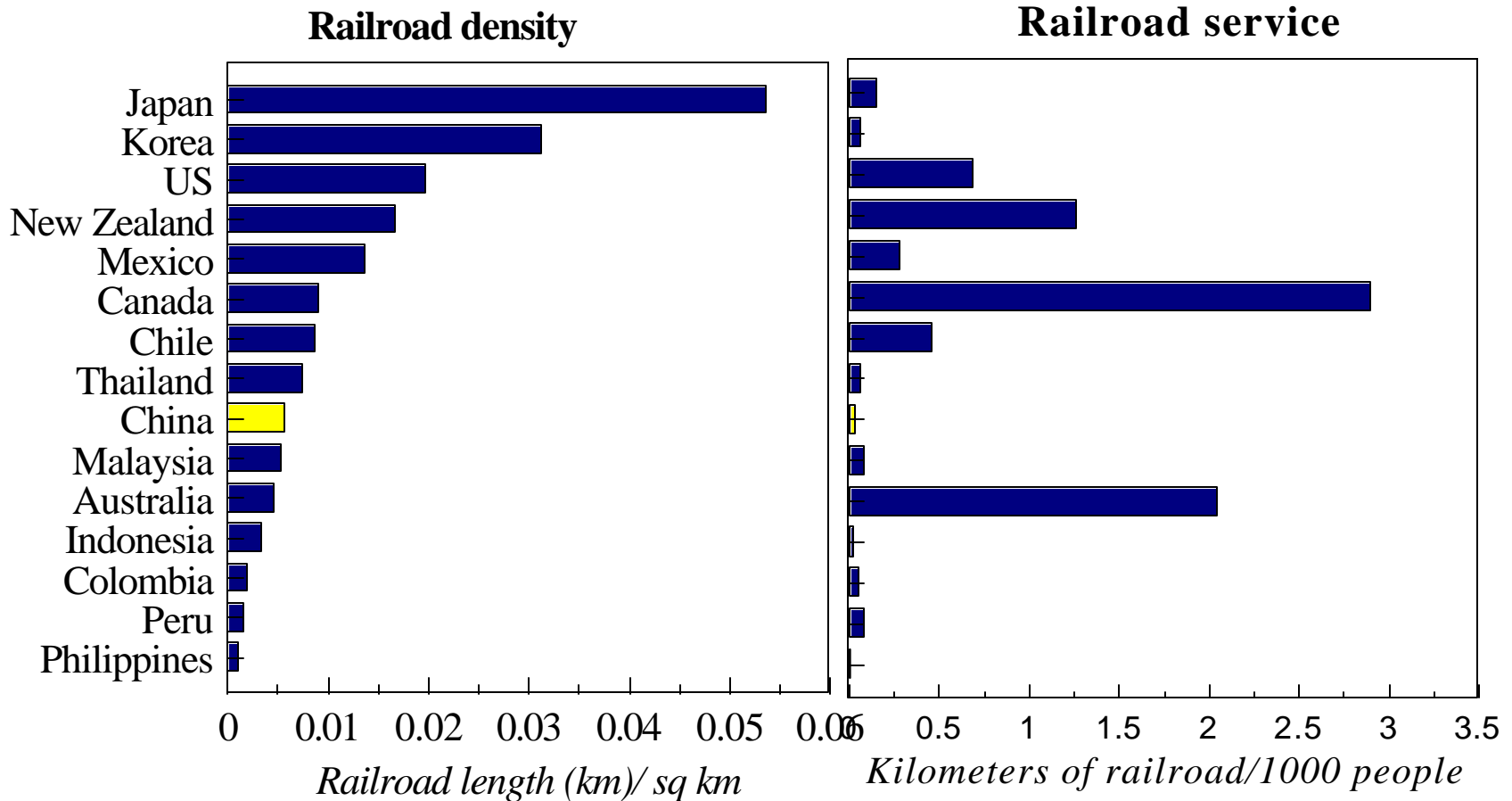
Current status of infrastructure  
and transportation in Asia

Impact on food system

Outlook



# Railroad Density and Service

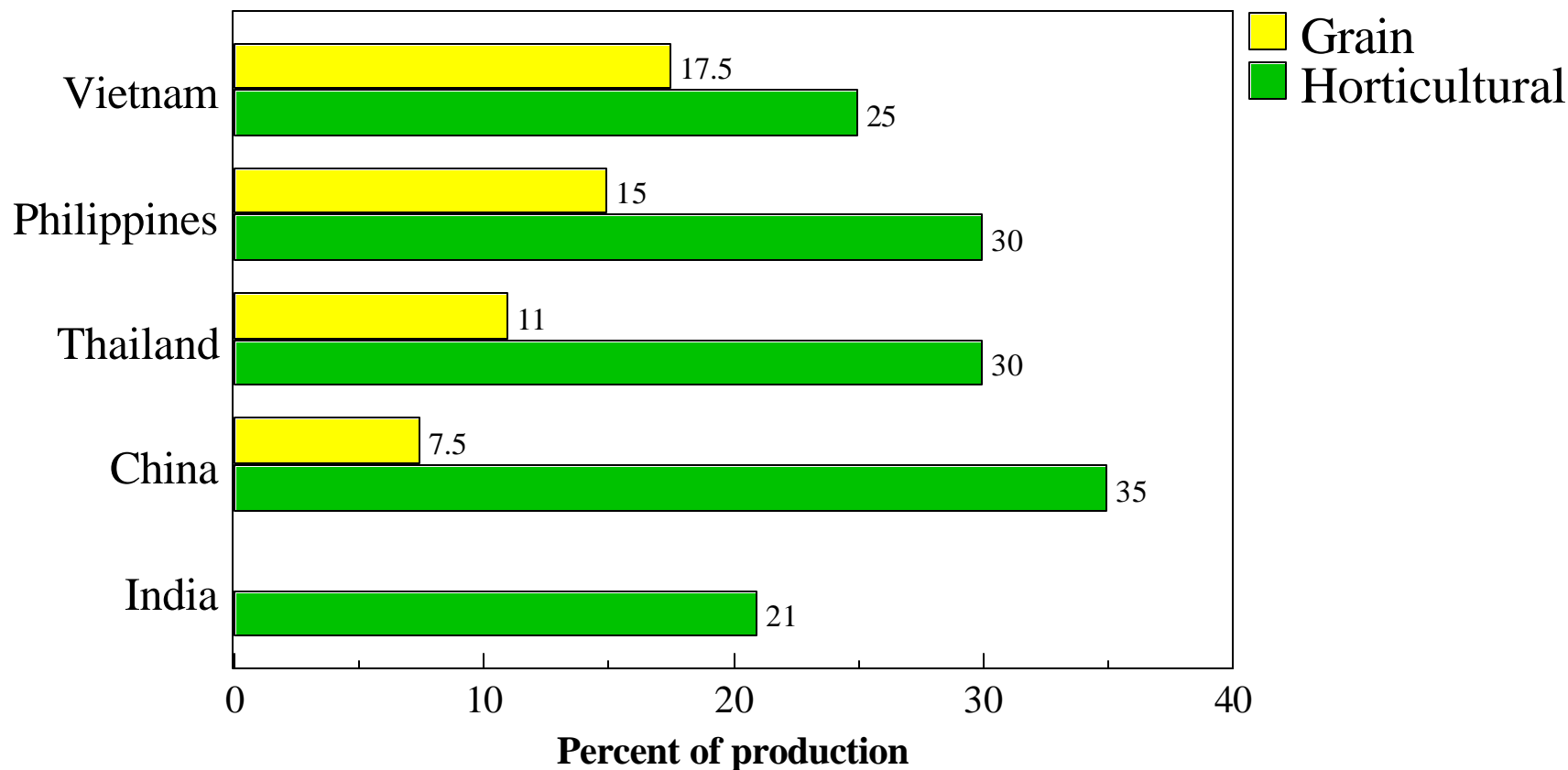


Note: Most data are for 1993;  
population numbers are for 1996.

Source: David Canning, A Database of World Infrastructure  
Stocks, 1950-95, World Bank



# Post Harvest Losses, Selected Asian Countries



Source: The 5th JIRCAS International Symposium,  
Postharvest Technology in Asia--A Step Forward to Stable  
Supply of Food Products, Tsukuba, Ibaraki, Japan, Sept. 9-10, 1998





*It takes about the same time to ship California grapes to Guangzhou, more than 3X the distance, about 7,500 miles*

# Some Important Asian Infrastructure Projects

---

Hong Kong--Shenzen--Pearl River Delta

Yantian, Chiwan, and Shekou

China's \$42 billion in 7,000 additional kilometers of new track by 2005; east-west links connecting natural resources in west with manufacturing capacity in east.

East-west high speed railway linking Shanghai with cities of southwestern Sichuan (reducing transit time from 41 to 24 hours); in planning

Beijing-Shanghai high speed link (from 14 to 5 hours); underway in 2005

Beijing-Guangzhou (from 24 to 14 hours); in planning

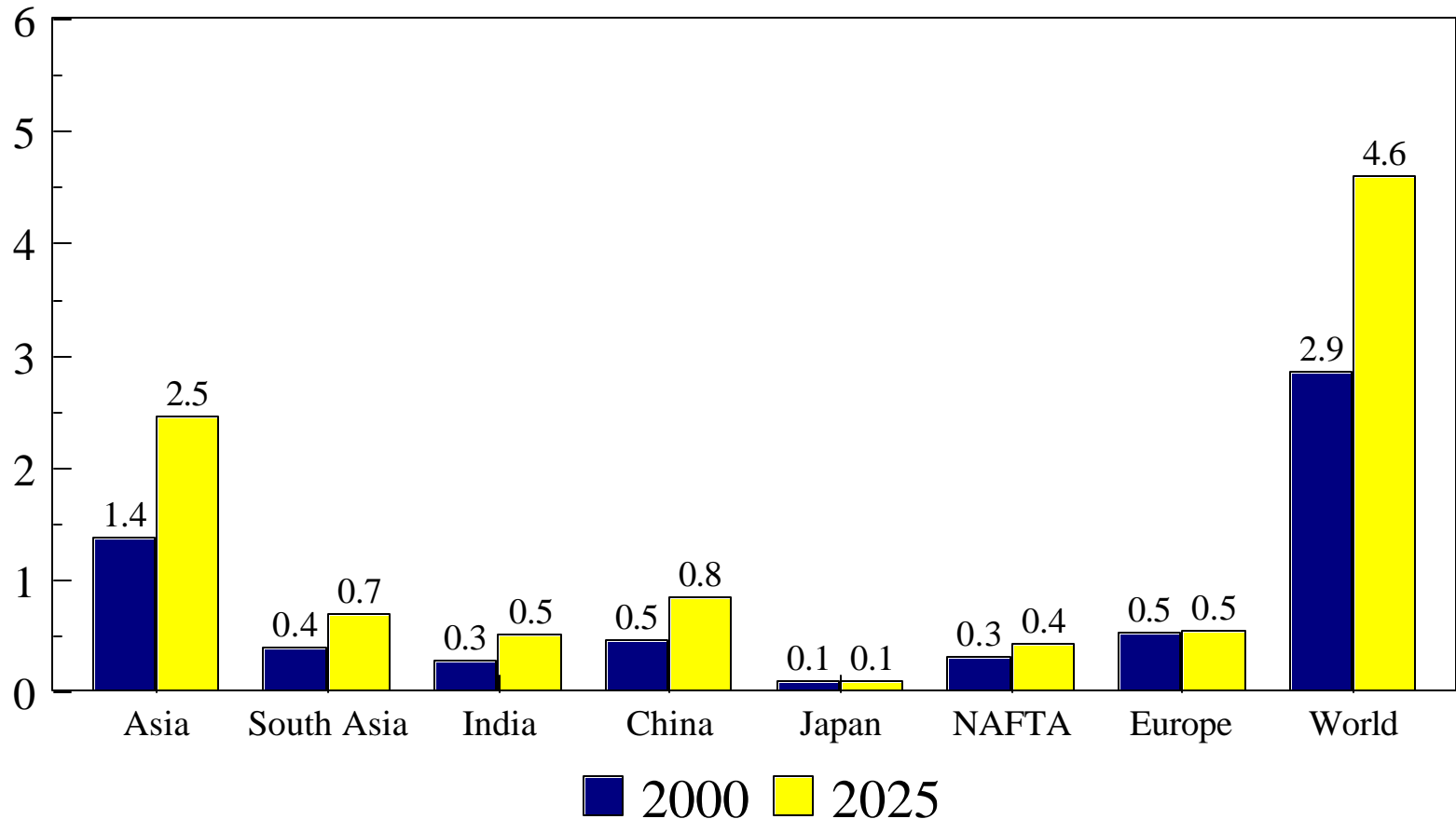
New rail link connecting three southern Chinese provinces with Southeast Asia; completed

India's 10-year \$12 billion National Highway Development Plan--linking major cities, ports and regions, 8,000 miles, completed by 2009 (will cut travel time by more than 50 percent); funding sources: The World Bank, fuel tax, and other institutions.



# Urban Population in Asia Projected to Nearly Double by 2025

Billions of people



# More than Half of Megacities in 2015 Will Be in Asia

---

<i>City</i>	<i>Population (million)</i>	<i>Asia</i>	<i>Coastal</i>
Tokyo	26.4	X	X
Mumbai (Bombay)	26.1	X	X
Lagos	23.2		X
Dhaka	21.1	X	X
Sao Paulo	20.4		
Karachi	19.2	X	X
Mexico City	19.2		
New York	17.4		X
Jakarta	17.3	X	X
Calcutta	17.3	X	X
Delhi	16.4	X	
Metro Manila	14.8	X	X
Shanghai	14.6	X	X
Los Angeles	14.1		X
Buenos Aires	14.1		X
Cairo	13.8		
Istanbul	12.5		X
Beijing	12.3	X	X
Rio de Janeiro	11.9		X
Osaka	11.0	X	X
Tianjin	10.7	X	X
Hyderabad	10.5	X	
Bangkok	10.1	X	X

# Wrap up

---

Better infrastructure and transportation systems do matter:

- Crucial to the economic development and growth of Asia;
- Enhance food system, allowing for more efficient marketing of food products, both domestic and imported;
  - Allow rural populations to benefit from market opportunities, adjust to international competition, and reap the benefits of trade expansion and market globalization; and
  - Mitigate environmental and social problems from intense urbanization.