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## China's Food Demand and Global Food Security

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China is a huge country with 1.2 billion people and its economic reforms during the past twenty years have caused a large wave of migration from rural to urban areas. Urbanization and changing food consumption patterns in China will significantly impact the world food market in the future and will affect the performance of American agriculture. This research analyzed food consumption patterns by Chinese households in both rural and urban areas. Household survey data was used from the coastal region of Jiangsu, Shandong, and Guangdong provinces in China. These data were used to develop statistical models of food demand. From these models, we can understand the important factors affecting food choices by Chinese households and the potential demand for U.S. products.

Our statistical results show that the most important factors are prices, income, and demographic characteristics of households. Income is among the most important factors for projecting the long-term food consumption in China. We found that income effects differ drastically between urban and rural households. It is therefore very crucial to incorporate these factors in projecting future food demand for China.

## OBJECTIVES

- ▶ Identify and measure factors affecting food consumption and demand in China and their implications for global food security.
- ▶ Estimate demand elasticities for key food items consumed by Chinese households, such as grains, meats, and dairy products. These elasticities provide important information for assessing market potential for various food commodities in China.
- ▶ Identify and measure demographic factors such as population growth and migration between rural and urban areas in China.

## CHALLENGES

The challenge was to understand the dynamics of price and income and food consumption patterns in China, the implications for global food security, and the future demand for U.S. agricultural products.

## ACHIEVEMENTS

This research provides a basic understanding of food consumption patterns in China and will be useful to construct models to forecast food demand. These forecasts will be useful to agencies such as the World Bank to assess food supply and demand in China. Furthermore, this study is likely to stimulate additional economic and market research as we continue to validate these findings and as more data and better models become available.

## THE FUTURE

Funding from the OARDC Research Enhancement Competitive Grants Program enabled the researcher to obtain a \$140,000 grant from the USDA National Research Initiative Program. This grant will support continued economic research on food demand with more updated household data and more sophisticated economic and statistical models to analyze economic and demographic variables affecting food consumption in China.



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