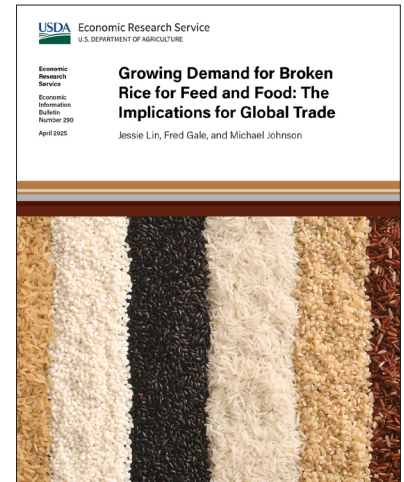




Growing Demand for Broken Rice for Feed and Food: The Implications for Global Trade

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What Is the Issue?

Rice is one of the world's most widely cultivated and consumed crops, and the efficient operation of the rice market is a critical concern for global food security. Increasingly, low-grade rice (or broken rice) has become an alternative substitute for animal feed, industrial processing, and blending in consumer products. Most consumers around the world prefer full grain¹ rice. The exception is consumers in a few countries in West Africa who prefer broken rice as food. How has the expansion of broken rice trade altered global markets? What led to the recent shifts in broken rice trade toward feed use in China? Could this shift affect broken rice imports in countries that consider broken rice as a food staple? To explore these questions, the report authors analyzed the emerging global markets for broken rice for human food, animal feed, and industrial purposes, focusing on China as the largest importer of broken rice.

What Did the Study Find?

In the past decade, the rice market has experienced an increase in the use of broken rice as animal feed and for other industrial purposes, in contrast to broken rice's traditional use as a low-cost staple food:

- Per capita consumption of all rice has decreased in China and other traditional rice-consuming countries in Asia as diets shift from grains toward proteins.
- Rice is increasingly used in the animal feed market, depending on prices of common feed grain alternatives (e.g., corn, wheat, and sorghum).
- The trend toward industrial use of rice partially reflects domestic policies that enabled the stockpiling of rice in many rice-producing countries.
- Broken rice is preferred for use in animal feed when its price drops below that of corn or other feed grains. In 2021 and 2022, China increased its imports of broken rice as domestic prices for corn, wheat, and sorghum rose.

¹ In the United States, "full grain rice" is also referred to as "head rice."

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How Was the Study Conducted?

This report utilized multiple data sources. U.S. Department of Agriculture, Foreign Agricultural Service's Production and Supply Distribution, Trade Data Monitor, United Nation's Food and Agriculture Organization (FAOSTAT), Organisation for Economic Cooperation and Development's (OECD) Agricultural Outlook, and National Bureau of Statistics of China data are used to analyze and compare rice production (human and feed), consumption, and import/export trends. We analyzed data on West African rice imports from Base pour l'Analyse du Commerce International (BACI) of the Centre d'Etudes Prospectives et d'Informations Internationales or CEPII. The BACI database reconciles inconsistencies in import and export data reported by countries to the United Nations. BACI data were available up to 2021 only.

The report authors analyzed the relationships between rice consumption trends (food versus feed) imports, exports and the evolution of the rice market in China and other parts of the world.

The authors reviewed articles in academic journals, reports from international organizations, and reports of current events for background information.