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# The growing U.S. rice market: it's not just a

by Gail L. Cramer and Eric J. Wailes

Rice is the single most important food source in the world, accounting for over 22 percent of global caloric intake. World per capita consumption averages 141 pounds annually, but exceeds 200 pounds in some Asian countries, while Europeans consume less than 10 pounds. China and India produce approximately 68 percent of the world's rice; overall, Asia accounts for 92 percent. North and South America produce 5 percent, Africa produces 2 percent, and Europe and other countries produce only 1 percent. Rough rice production has increased 100 million metric tons per decade since 1950, primarily due to increased yields.

United States consumption increased from 14 pounds per capita in 1984 to 25 pounds per capita in 1994. Hawaii, California, Washington, the Atlantic coast region (from New York to Florida), and Louisiana consume the most rice per capita, because of tradition, nutritional concerns, and large Asian and Hispanic populations.

United States consumers use rice in processed products such as breakfast cereal, flavored packed mixes, pet food, baby food, rice cakes, frozen entrees, soups, beers, and candies. Higher-valued uses of rice by-products are expanding rapidly. The baking industry uses stabilized rice bran as a food ingredient. Oil extracted from rice bran makes a superior cooking oil, which is widely used in Japan. Farmers use bran for animal feed in rice production areas; other users burn rice hulls to generate electricity and scatter hulls for poultry litter. Rice hull ash can be made into an excellent absorbent (used in kitty litter and for cleaning oil spills).

Five states produce most of the rice in the United States: Arkansas (40 percent), California (23 percent),

Louisiana (15 percent), Texas (10 percent), Mississippi (8 percent), and Missouri (3 percent). The rice types vary by length of the rice grain: long (70 percent), medium (29 percent), and short (1 percent). Arkansas produces 53 percent of long-grain rice (Indica), while California produces 66 percent of medium-grain rice (Japonica).

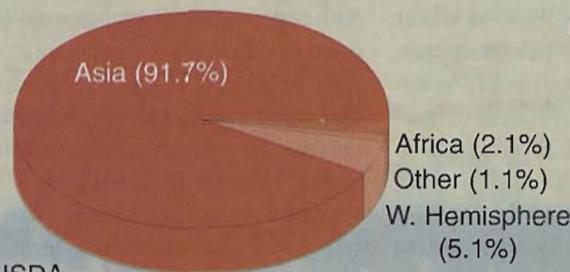
Only 4 percent of rice production is traded internationally, compared to 18 percent for wheat. Thailand, the United States, Vietnam, China, India, and Pakistan typically are the major exporters of rice, and together they account for 70 percent of all rice exports. Major rice importers are the European Union, Saudi Arabia, Iran, Iraq, Brazil, Mexico, and sub-Saharan Africa. The United States

exports about 50 percent of its rice, most of it going to Saudi Arabia and other Middle Eastern countries, Canada, Mexico, and Europe. The United States imports about 8 percent of its total rice consumption, of which most is scented or aromatic rice (jasmine or basmati).

Under the market access rules of the Uruguay Round of GATT completed on December 15, 1993, Japan and South Korea began to open their

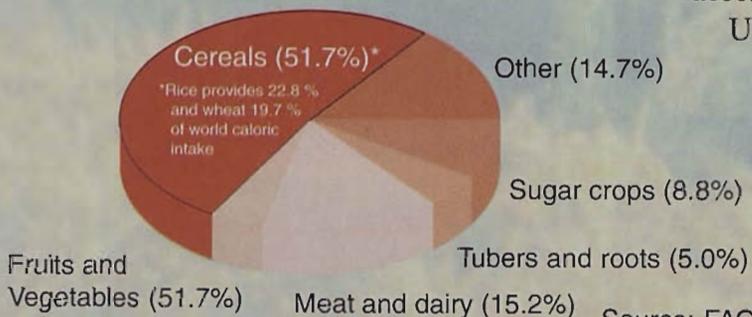
medium- and short-grain rice markets in 1995. In 1995, Japan will import 379,000 and South Korea will import 50,000 tons. Total exports to these countries will grow to over 1 million tons by the year 2000. Long-grain markets will continue to expand in the European Union and in the Middle East. Overall, trade liberalization will greatly expand trade, because most countries protected their basic food supplies.

Figure 1. World rice production



Source: USDA

Figure 2. World caloric intake by food source



Source: FAO

Figure Total pro

Missouri (2.9%)

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Uruguay Round of

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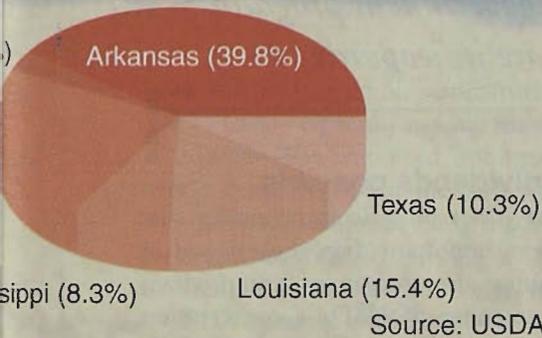
# Asian food anymore

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In the United States, the rice farm program resembles that for other grains and includes a target price, a loan rate, deficiency payments, normal flex acreage, and any other acreage reduction requirements. U.S. export programs, similar to those of other countries, support rice exports. These programs include Commodity Credit Corporation credit, PL 480, and the Export Enhancement Program.

### 3. Share of U.S. rice production

Production: 156.1 million CWT (rough), 1993



From 20 to 40 percent of U.S. annual rice exports involves one of these export programs.

United States cash prices for rice have moved closer to the

world price of rice since the enactment of the Marketing Loan Program in the 1985-86 crop year. The Marketing Loan Program allowed rice farmers to repay their nonrecourse loans at the world price rather than at the loan rate. Now U.S. rice prices generally follow the Thailand price (which is considered the world reference price), but at a higher level because of the record strength of U.S. demand for rice and its high quality.

Since only 4 percent of the world rice crop is traded, small changes in international rice conditions cause large changes in world and U.S. prices. For instance, the short crop in Japan in 1993 caused the U.S. rough rice prices to move from \$5.19 per cwt to over \$10.20 per cwt. The opening of the Japanese and South Korean markets with GATT should strengthen U.S. cash prices.

We have estimated that a total trade liberalization of rice trading would increase world welfare by about \$5 billion. But concerns about food security, conservation, and food safety qualify acceptance of a total liberalization policy. While world rice trade is increasing, substantial tariff barriers to trade still exist.

Figure 4. World food consumption of rice and wheat

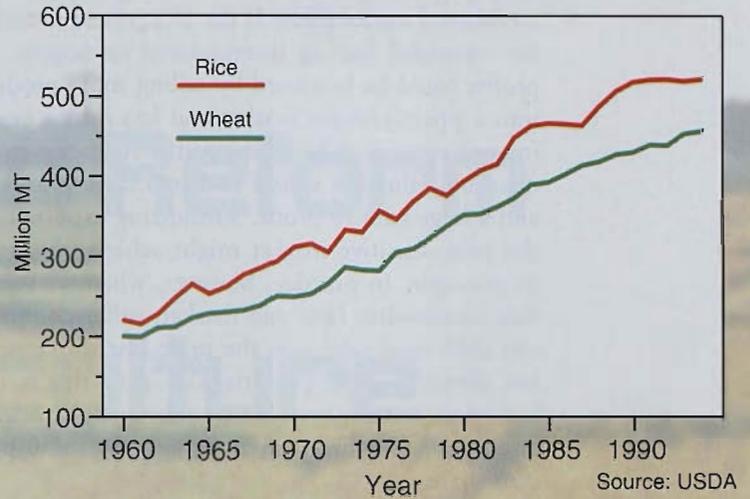


Figure 5. Monthly Houston and Bangkok FOB prices

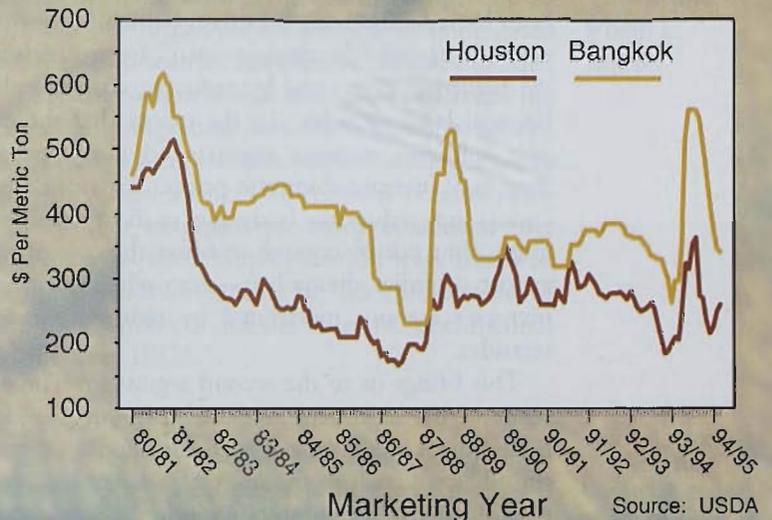


Figure 6. U.S. consumption of rice for food

