Mauritania
Improving Farm Production

The U.S. Agency for International Development (USAID) awarded the University of Arizona $2.7 million in November 1985 for a project to improve agricultural production in the Senegal River Basin in Mauritania. Roughly 50 UA researchers will be involved in the five-year project that is administered by the UA Office of Arid Lands Studies.

Mauritania, an extremely arid country in Francophone, West Africa, has suffered from the drought that struck the Sahel during the last decade. As a result, cereal production has dropped, making the nation more dependent on foreign aid and commercial imports. The UA project is responding to the Mauritanian need to establish an effective agricultural research strategy for developing the Mauritanian portion of the Senegal River Basin. Researchers and planners say the Mauritanian government's goal of self-sufficiency in food production might be met by a transition in agricultural practices, including changes from recession to irrigated farming and improved crop types and yields with consequent increased economic returns.

The project will use a farming systems research base. This is a multidisciplinary approach to agricultural development that attempts to develop appropriate technologies for small farmers. UA departments involved in the project include: Agricultural Economics, Agricultural Engineering, Animal Sciences, the Bureau of Applied Research in Anthropology, Entomology, Hydrology, Nutrition and Food Science, Plant Sciences, the School of Renewable Natural Resources, Soil and Water Science, Systems and Industrial Engineering, Veterinary Science, and the French Department.

A team of UA researchers and their counterparts from the National Center for Agronomic Research and Develop-

ment (NCARD) will first talk in detail with farmers about current farming practices. This "reconnaissance survey" will enable researchers to understand the physical, socioeconomic and political features of Mauritanian agriculture. They can then identify promising alternative practices and test those technologies on-station and on-farm to ensure that they will work in a regional context. The project will involve farmers in the entire process—from design to implementation.

—Michael Norvelle
Office of Arid Lands Studies

International Trade
The Effects of Protectionism

It has been said many times but it bears repeating, there has been an enormous growth in total world trade in agricultural products during the last ten years. Foreign commercial sales of coarse grains more than doubled. Wheat was up 50 percent; cotton increased 30-40 percent. Even though the share of domestic agricultural production exported has fallen in the past three years, the ratio of exports to domestic production and the U.S. share of world trade in major traded products is still high.

The agricultural export trade of the United States and of Arizona is now being threatened by renewed protectionism reminiscent of the 1930's. Research in the Department of Agricultural Economics has shown that, during the past few years, there has been a dramatic rise in indirect or administrative protectionism, most of which has been associated with national laws and regulatory activities. It has been demonstrated that a variety of administrative devices are used by foreign government officials and regulatory agencies to protect the agriculture of developed, as well as developing, countries. These devices are well recognized protective mechanisms, and currently economic scientists in the department as well as elsewhere are turning toward analyses which demonstrate the effective protectionistic nature of these regulatory measures.

Research results from the Project "Livestock and Meat Legislative and Regulatory Devices As They Affect In-
International Trade” and prior projects justify continued research in the area of agricultural trade policy. The export marketing of agricultural products is treated in such a manner as to demonstrate the importance of trade in the world economy and the U.S. economy. Because of the considerable change in the nature of agricultural trade, however, it is pertinent that research now turn to agricultural trade questions contained in the agricultural trade bill which has just passed the Congress and which was signed by the President in late 1985. Moreover, research must treat the upcoming negotiations on the General Agreement on Tariff and Trade (GATT) which are underway in Geneva, Switzerland.

No doubt, foreign markets will continue to be a very important factor in the success of Arizona and U.S. agriculture. A better understanding of foreign competition and our role in foreign markets as well as the role of others in our domestic market is even more important now than ever before. Of particular importance is the research which must be done on institutions and obstacles to a freer flow of agricultural products. Trade, in a global sense, beneficial for producers and consumers, but it does educe a redistribution of income. Research on this question is of great importance to the national economy and to Arizona agricultural producers and to all our consumers.

—Dr. Jimmye S. Hillman
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World Grain Markets
The Impact of Gov’t Policies

International trade plays a prominent role in the marketing of many American farm products, and a number of research projects in the Department of Agricultural Economics are devoted to improving our understanding of the ways that these markets function.

The U.S. is one of the few countries that allows the private sector to participate directly in international grain markets. For the vast majority of the world’s consumers and producers, international market participation is government regulated, usually through import licensing and less common through quotas and licensing procedures. In 1980, for example, two-thirds of wheat consumption, two-fifths of corn consumption, and three-fourths of rice consumption were located in countries with government monopolies on international trade. In countries that maintain trade controls, world prices do not play a direct role in consumer decisions about the quantity and types of grain to purchase. Similarly, world prices have no direct influence on producer crop selection and output decisions.

Two principal reasons explain the prominence of trade control policies in world grain markets. First, governments often wish to maintain ‘low’ prices for their consumers. Whereas much of the media interest has focused on the ‘high’ prices for grains in Japan and Western Europe, the major share of the world’s grain consumption (and production) occurs in the centrally-planned and developing countries, and at prices that are below world market levels. By importing grain on government account and then selling this grain on the domestic market at a lower price, governments minimize the budgetary cost of achieving low consumer prices.

A second reason that governments maintain international trade controls involves price variability on world markets. Policy-makers in low income countries are hesitant to allow the transmission of this variability to consumers, who spend as much as 60 percent of their total food budget on grains. But the great irony about world market prices is that trade policies themselves accentuate price variability.

If all consumers and producers responded to world market conditions, world prices would only change by relatively small amounts because variations in aggregate demand and supply curves are never very large from one year to the next. Yet because governments isolate their own markets, all of the adjustment burden to a shift in supply or demand falls on those few countries (such as the U.S.) who are responsive to world prices. Small fluctuations in global demand and supply are large relative to the size of international markets, and price fluctuations become large as well. This situation exemplifies a “prisoner’s dilemma” – world prices would be more stable if all countries liberalized their domestic markets, but lack of control over foreign government policies prevents any individual government from changing its own stance toward international trade.

How can we cut the Gordian knot and move to world markets that have less price variability, where production and trade patterns correspond better to relative efficiencies across countries? No definitive answers are yet available. Substantial research has been devoted to studying buffer stocks and other types of grain reserve schemes as ways to achieve stability. But perhaps more important is the process of economic development and growth in the low income economies.

Diets diversify as incomes increase, and meat, dairy products, fruits and vegetables play increasingly important roles in the food budget. With diversified diets and higher incomes, consumers become less susceptible to the effects of price variability in grains, and the attractiveness of government price controls is correspondingly reduced. Interestingly, these dietary changes imply substantial increases in indirect demand for grain (used as feed), as well as increased demands for specialty products. Although the course of agriculture production growth in developing countries remains uncertain, economic development may well lead to markets for American farmers that are both larger and more stable.

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