Competing in the World Marketplace:
The Challenge for American Agriculture

By Mark Drabenstott and Kim Norris

The international dimension is critical to American agriculture’s current adjustment. In the 1970s, booming farm exports ushered in farm prosperity. But in the 1980s, slumping U.S. farm exports due to stagnant world food demand and intense export competition contributed significantly to great financial stress for farmers, lenders, and agribusiness. Thus, restoring U.S. prominence in the world food and fiber market will be vital in overcoming many of U.S. agriculture’s current problems.

How can American agriculture better compete in today’s world food market? To provide some answers to that critical question, the Federal Reserve Bank of Kansas City sponsored a two-day symposium on ‘‘Competing in the World Marketplace: The Challenge for American Agriculture.’’ The symposium was held in Kansas City, Missouri, on October 31 and November 1, 1985. The consensus view at the symposium was that changes in agricultural policy and ongoing technological advances will enable U.S. agriculture to become more competitive in world markets. But participants also quickly agreed that the exchange value of the dollar and the health of the world economy would be even more important in affecting U.S. farm exports.

This article summarizes the presentations and discussions at that symposium. The article follows the agenda shown in the accompanying box. The first section considers the imperative of competition, the second examines the role of technology in enhancing competitiveness, while the third explores the role of policy—agricultural, international economic, and national economic—in enhancing competitiveness. The final section considers the challenge in building market demand in less developed countries.

Opening address

Governor John Carlin of Kansas set the stage for the symposium with an address, ‘‘Trade and Agriculture: A Governor’s Per-
Trade and Agriculture: A Governor’s Perspective
John Carlin, Governor of Kansas

The Imperative of Successful Competition
Daniel G. Amstutz, Undersecretary of Agriculture for International Affairs and Commodity Programs, U.S. Department of Agriculture
Martin E. Abel, President, Abel, Daft, and Earley, discussant

Enhancing Competitiveness: Real Factors
Infrastructure and Agriculture
Ray A. Goldberg, Moffett Professor of Agriculture and Business, Harvard University
James E. Tillotson, Vice President of Technical Research and Development, Ocean Spray Cranberries, Inc., discussant

Research and Technology in Agriculture
Michael J. Phillips, Project Director, Food and Renewable Resources Program, Office of Technology Assessment, U.S. Congress
John T. Marvel, General Manager, Science and Technology for Europe/Africa, Monsanto Company, discussant

Enhancing Competitiveness: Policy Factors
U.S. Agricultural Policy
Richard E. Lyng, President, Lyng and Lesher
Harold F. Breimyer, Professor Emeritus, University of Missouri-Columbia, discussant

International Economic Policy
Graham J.L. Avery, Counsellor, Commission of the European Communities
D. Gale Johnson, Eliakim Hastings Distinguished Professor of Economics, University of Chicago, discussant

National Economic Policy
Manuel H. Johnson, Assistant Secretary for Economic Policy, U.S. Department of the Treasury
Robert Z. Lawrence, Senior Fellow, Brookings Institution, discussant

The Challenge in Building Market Demand
Dale Hathaway, Vice President, Consultants International Group, Inc.
Orville L. Freeman, Former Secretary of Agriculture, Chairman, International Division, Popham and Haik, discussant
Jerry M. Hiegel, Chairman of the Board and Chief Executive Officer, Oscar Mayer Foods Corporation, discussant

perspective.” While emphasizing the importance of international trade for agriculture, Governor Carlin cautioned that the United States cannot carry out protectionist trade policy with impunity.

The governor began by focusing on the internationalization of agriculture, noting that the output of 25 percent of U.S. farm acreage is exported. He then pointed out that, while the U.S. share of the world market has
declined from 61 percent in 1981 to 50 percent in 1985, domestic agricultural production has steadily increased. This accounts for much of the agricultural surplus problem now facing the nation.

Governor Carlin stressed the need for a comprehensive trade policy that would include dialogue with the European Community (EC) and cautioned against protectionism. Although a trade policy that enhances the competitiveness of farm exports is necessary, such a policy would not be sufficient to expand trade. Also needed are reductions in the federal budget deficit, an end to the use of agricultural commodities as a foreign policy weapon, greater stability in domestic farm policy, and a concerted effort to promote U.S. agricultural products abroad.

The imperative of successful competition

In a paper entitled "The Imperative of Successful Competition," Undersecretary of Agriculture Daniel Amstutz argued that more market-oriented farm programs and successful negotiation of fair trade practices are essential for the United States to regain competitiveness in world agriculture markets. Amstutz noted that the increasing productivity of U.S. agriculture and a mature domestic market for farm products mean U.S. farmers must depend on exports to maintain their incomes. But other agricultural producing nations also are striving to maintain farm incomes through exports. Consequently, the policies of competing countries are often at odds, with each country trying to capture a larger share of the world market for its own farm commodities.

Amstutz made a careful distinction between "comparative advantage" and "competitiveness." Comparative advantage is the trade patterns that would exist in the absence of market distortions. Competitiveness is the trade patterns that do exist in the presence of government policies. He then noted that the United States has a comparative advantage in agriculture, but may not be competitive in agriculture. He cited the shrinking U.S. share of world grain trade as evidence of declining competitiveness in the 1980s and attributed this decline to several factors.

While noting the adverse effects of a strong dollar and sluggish world economic growth, Amstutz identified inflexible farm programs and unfair competitor trade practices as the primary constraints on competitiveness. He suggested that high U.S. farm support prices act as export taxes, allowing competitors in other countries to undersell the United States. The high support prices in effect establish a global price umbrella for agricultural commodities, signaling the rest of the world to increase production. He also held unfair trade practices, notably by the EC, responsible for a shrinking U.S. share of world food markets. Export subsidies, import tariffs, and non-tariff barriers all hurt U.S. sales.

Amstutz emphasized the need for the United States to reorient its domestic farm programs—by allowing crop support prices to reflect market realities—and to negotiate rules of fair trade with the EC. Through these actions, he said, the United States can use its comparative advantage in agriculture to supply a larger proportion of the world's food needs.

In discussing Amstutz's paper, Martin Abel agreed that the United States must become more competitive in world markets. He suggested, however, that more than market-oriented farm programs and fair trading rules are needed to overcome the underlying problem of surplus U.S. agricultural production capacity.

The fundamental challenge for U.S. agricultural exports, according to Abel, is to stimulate growth in world trade. And the potential
for trade growth lies mainly with the developing countries. Two things can be done to speed growth and development in potential markets for U.S. farm exports. One is for the United States to use existing economic assistance and agricultural export programs more effectively. The other is for the United States to keep its markets open to agricultural and nonagricultural imports from developing countries. Although price competitiveness is important, Abel concluded, it is equally important for the United States to use economic assistance programs in stimulating world economic growth and world agricultural trade.

Enhancing competitiveness: real factors

Infrastructure and agriculture

In "Infrastructure and Agriculture," Ray Goldberg examined how U.S. agribusiness has used infrastructure and institutional arrangements to compete in global agribusiness. He began by suggesting that farm price supports under postwar farm programs made possible the application of capital-intensive technology to agriculture, but caused farmers to rely on those government programs rather than markets. The result was surplus agricultural production that led to the development of extensive infrastructure— including a domestic storage program—and a variety of institutional arrangements to make use of agricultural resources.

Goldberg argued that U.S. agribusiness did not have to compete on a global basis until the 1980s. The trade boom of the 1970s enabled the United States to vertically integrate its food and trading system around a global market. But now the United States must compete in a global market that not only has stopped expanding but has gone into decline. Goldberg cited the resulting excess capacity in all aspects of agribusiness—farm inputs, transportation, processing, and distribution. Many producer countries have insulated their agricultural sectors from the global economy, but the United States has not. As a result, agribusiness in the United States is in the midst of a major restructuring.

Goldberg identified some actions agribusiness and policymakers can take to restructure U.S. agribusiness and make it more competitive. Keen market orientation, product and service differentiation, innovative financing, and maintenance of market access will be essential tools for keeping agribusiness competitive. He insisted, moreover, that international trade in agriculture is not conducted solely on the basis of price. Such factors as reciprocal trade agreements and the technology associated with a commodity are also important. These factors, he argued, will lead to new types of firms, institutions, and joint ventures to meet the demands of the marketplace.

Goldberg concluded with several other suggestions for making U.S. agribusiness more competitive in world markets. He cited the need for renewed efforts to capture the growth markets of Southeast Asia, Latin America, Africa, and the Middle East. He said a restructuring of U.S. agribusiness is also required, both internally and externally. He predicted that business alliances to meet demand for differentiated products, such as the alliance between Continental Grain and A.E. Staley, will become more common. In the same vein, he encouraged U.S. food processors to make further investments in technology to maintain competitiveness. He said U.S. agribusiness can no longer afford to neglect its value-added potential.

In discussing Goldberg’s paper, James Tilloston argued that much can be accomplished
through American ingenuity and technology. Like Goldberg, he encouraged both the public and private sectors to adopt a systems approach to making U.S. agribusiness more competitive, noting that in international trade we market not just a commodity, but a whole network of infrastructure and technology associated with the commodity. Tillotson also called for a more creative pooling of resources among agribusiness companies and a more market-oriented mentality. He concluded with a reminder that U.S. agriculture was built on superior research and technology and appealed for increased investment in agricultural technology.

Research and technology in agriculture

In his paper, "Research and Technology in Agriculture," Michael Phillips focused on biotechnology advances and their implications for U.S. agriculture. He argued that technology has made U.S. agriculture one of the most productive and competitive industries in the world. He noted three main eras in technological development: the mechanical era of 1920-50, the chemical era of 1950-80, and the biotechnology and information era that is just beginning. The implications of this new era could be more profound than either of the previous two.

Phillips defined biotechnology as any technique that uses living organisms to make or modify products, to improve plants or animals, or to develop microorganisms for specific uses. The promising areas of biotechnology for agriculture fall into two broad categories: animals and plants. In animal agriculture, the potential applications of biotechnology include genetically engineered pharmaceuticals, gene insertion, and embryo transfer. These techniques should substantially increase productivity. In plant agriculture, the application of biotechnologies could modify crops to generate more nutritious protein, resist insects and disease, grow in harsh environments, and provide their own nitrogen fertilizer. The immediate impacts of biotechnology will be greater for animal agriculture, he said, but the long-term impacts may be most significant for plant agriculture.

Both public and private funding are important to biotechnology research. Federally funded research has been essential to the development of biotechnology in the United States, giving this country a strong and diversified basic research capability in biotechnology. In the private sector, two distinct sets of firms are pursuing commercial applications of biotechnology. New biotechnology firms have been started as entrepreneurial ventures specifically to make commercial use of innovations in biotechnology. Established companies, on the other hand, intend to apply in-house biotechnology research and development to existing or new products and processes. While expenditures on biotechnology research by the private sector are difficult to estimate, Phillips said they are probably two to three times what the government has spent.

Phillips outlined three factors that are essential to the further commercial development of biotechnology. The first key factor for conducting research is financing and tax incentives for firms. Some 100 biotechnology firms have been started by private venture capital since 1976. He argued that the United States
has the most favorable tax environment for capital formation and small-firm financing of the major competitor countries. Government funding of research is a second factor. Of concern in this area is the widening gap between basic research funded by the government and the short-term, product-specific applied research funded by private industry. Phillips warned that the relatively low level of government funding for applied research in biotechnology could create a bottleneck in the commercial application of biotechnology. The third critical factor is the availability of adequately trained scientific and technical personnel. The United States needs to maintain its generally high level of training programs for basic scientists.

Phillips predicted that Japan will be the most serious U.S. competitor in biotechnology. Japan has a strong technology base on which to build, and the Japanese government has specified the development of biotechnology as a national priority. He did not expect European countries to be as competitive in biotechnology as the United States and Japan.

Like Phillips, Marvel expected international competition in biotechnology research to become intense. But he regarded Europe as more of a potential competitor than Japan. He noted that western Europe offers an excellent tax and business environment for investment in biotechnology. Moreover, a disproportionate share of the world’s major “life science” companies is based in Europe. These companies, he said, will likely make every effort to maintain their positions.

While Marvel agreed that finance and tax incentives, government funding, and trained personnel are important factors in maintaining a competitive edge in biotechnology, he said the private sector would consider patent protection, property rights, and regulation equally critical. He argued that property rights, the regulatory process, and the relationship between industry and academia could be decisive factors in international competitiveness.

**Enhancing competitiveness: policy factors**

**U.S. agricultural policy**

Richard Lyng, in his paper, “U.S. Agricultural Policy,” argued that U.S. farm policy has grown more important to U.S. food trade in the 1980s. An American belief in the 1970s that expanding exports were “our birthright” led to farm programs that damaged exports in the 1980s. Specifically, Lyng pointed to the steady climb in crop loan rates as encouraging foreign crop production that eventually began to displace U.S. exports. Moreover, the loan support prices under the 1981 farm bill became so high relative to world market prices that the United States was priced out of the export market and forced into becoming the residual supplier.

While recognizing the critical role of the
exchange value of the dollar, Lyng claimed that lower crop loan rates are necessary to enhance competitiveness. He predicted the most historic feature of the 1985 farm bill would be a lowering of crop loan rates. But the dilemma created by lower support prices is that target prices likely will be kept high to protect farmers' incomes. Farm programs, therefore, become even more expensive. Lyng predicted that the annual cost of commodity programs in the next few years could exceed the more than $30 billion spent in 1983, when the PIK program was in place.

Lyng further argued that the United States almost certainly will continue to have huge commodity surpluses, as the high target prices will encourage production. The surpluses likely will result in ongoing and substantial acreage reduction programs. Lyng opposed such programs, claiming they reduce the cost efficiency of U.S. farms by raising unit costs, thereby lowering competitiveness.

Lyng cited two other aspects of agricultural policy that deserve more attention to enhance the competitiveness of U.S. farm exports. The first is the reliability of the United States as a supplier of food in world markets. He argued that doubts about the U.S. reliability still linger among foreign buyers. The second is the importance of farm product quality. Lyng suggested that producers in the United States must sharpen their understanding of quality and move rapidly to keep up with the quality of competitors.

In discussing Lyng's paper, Harold Breimyer agreed that crop loan prices should be lowered, but asserted that an overvalued dollar and 1983's massive acreage reduction program—the PIK program—were the chief culprits in curtailing U.S. farm exports. Breimyer raised questions about how much is really known about the world food market. He noted that little is known about the price responsiveness of foreign buyers and sellers of food. He also suggested that many diverse factors enter into trade decisions, including political considerations. Breimyer concluded that competitive export pricing may be at odds with our system of crop price supports that attempts to raise farmers' incomes. He suggested a possible two-tier price scheme to disengage these two conflicting objectives.

International economic policy

In his paper, "International Economic Policy," Graham Avery of the European Commission contended that the EC and the United States should seek greater cooperation on their many mutual objectives in agriculture. Those common goals include controlling production, limiting farm program costs, relaxing protection measures, making support price policies more market oriented, and integrating agriculture into the general economy.

Avery suggested that one bond will be especially strong in forging greater EC-U.S. cooperation. That bond is the need to create a better economic order by stimulating economic growth in the developing world. Both the EC and the United States have benefited from rapid growth in agricultural productivity. As a result, both must depend on export markets to alleviate surpluses. But food demand in developing countries has been anemic, not from a lack of mouths hungry for food but from desperate problems of indebtedness on the external account and an inability to pay.

Avery called for agriculture to be included in the next round of GATT trade talks. He then outlined some basic positions that the EC
would bring to those talks. First, the EC will maintain its position on world markets for import and export of agricultural products. Second, the EC will retain a system of variable levies on imports and variable refunds on exports to stabilize its internal agricultural markets.

But Avery also suggested that the EC's role in world trade in agricultural products could lead to some reform in the Common Agricultural Policy (CAP). He noted two possible steps in particular. First, export subsidies may be capped, with any additional costs to dispose of surpluses being borne by producers through a "co-responsibility levy." Second, in the longer term, support prices in the EC "could be fixed at levels closer to those of other exporting countries." Thus, he raised the prospect of the CAP becoming more market oriented but implicitly suggested the evolution will be slow.

Avery criticized the Bonus Incentive Export Enhancement Program (BICEP), a recent U.S. export promotion program. Calling it "a classic export subsidy program," Avery claimed the program had lowered world prices. He posed two questions, "Who benefits from this kind of measure? And who pays?"

Avery concluded that the prospect of a new multilateral round of trade negotiations—the proposed GATT talks—must raise hope that trade tensions will diminish between the EC and United States. He further suggested that talks on monetary stability should proceed in tandem with trade talks. And, he said that Japan must be a solid partner in supporting an open multilateral trading system.

In a spirited but friendly discussion, D. Gale Johnson challenged many of Avery's points. Responding to Avery's criticism of the three-year $2 billion BICEP program, Johnson noted that EC export subsidies were more than $5 billion in 1984 alone. Johnson also questioned Avery's criticism of U.S. powdered milk subsidies in 1982, noting that the EC has used subsidies to become the world's largest dairy exporter.

Johnson was disturbed by EC positions regarding the GATT round of talks. As a reason for retaining variable levies and export subsidies, Avery had said the EC "paid with concessions in earlier negotiations for the right to apply these mechanisms." Johnson asked what was paid. He said the EC had simply lowered import tariffs on what were then considered insignificant feed products, soybean meal, for example. As the products subsequently became more important, Johnson said that the EC had attempted to "weasel" out of the commitments. Even if the EC has paid a lot, Johnson wondered if that is a good argument for keeping a system that may be counterproductive to global interest.

Johnson took heart from the suggestion that in the longer term EC support prices will more closely reflect those of other exporters. But Johnson expected little if any progress, due to Avery's qualifier that the lowering "would be logical, especially for those products where the EC accounts for a significant part of world production."

The EC will retain a system of variable levies on imports and variable refunds on exports to stabilize its internal agricultural markets. —Avery

He concluded with some incisive general comments. He asserted that excess productive capacity in world agriculture will "haunt us for most of the rest of this century." Both the EC and the United States, with farm policies that encourage production, must accept responsibility for this predicament. Suggesting
that the decline in the rate of growth in international trade may not have ended, Johnson concluded that the United States and the EC can produce far more farm products than the markets will absorb at a reasonable return.

He suggested that U.S. agriculture may face a long period of difficult adjustment. Resources need to leave agriculture, he said. Questioning the willingness of either EC or U.S. policymakers to face up to this grim reality, he ended by saying, "I am quite pessimistic about the prospects for any real change before the end of this decade."

**National economic policy**

Manuel Johnson, in "National Economic Policy," presented a Reagan administration view of economic policy and its effects on agriculture. Briefly stated, that view is that America's new economic policy direction has been largely successful, having controlled inflation, stimulated investment, and unleashed individual initiative. Johnson viewed the problems of agriculture as largely transitional, brought on by the puncturing of the highly inflationary expectations of the late 1970s.

The most prominent policy decision that has led to economic successes, according to Johnson, was the reductions in tax rates in 1981. These cuts stimulated capital investment by increasing after-tax real rates of return on capital. The administration believes that maximum reliance should be placed on a productive private sector that is responsive to market signals. He said that, in the long run, the resulting market forces will bring real benefits to the entire economy, including agriculture.

Such developments as high real interest rates, large trade deficits, and large capital inflows into the United States are not really problems for the whole economy, he said. Rather, they indicate that supply-side incentives are succeeding. Johnson rejected the traditional view—that budget deficits raise real interest rates and attract a large inflow of foreign capital—as defective and lacking any demonstrable linkage. Johnson asserted that there are no simple answers about the effects of federal budget deficits.

A more obvious link, according to Johnson, is that Reagan administration policies have improved the investment climate by raising rates of return on capital. Thus, tax reduction combined with greater freedom of financial markets in this country has resulted in a voluntary inflow of capital from abroad. This borrowing from abroad ought not be viewed as adverse to long-run U.S. economic interest because the capital inflows are building a productive capital stock that will service the debt in the future.

Johnson concluded that no changes are needed in economic policy, either for the economy or for agriculture. Rather, he said the country needs to continue along present policy lines by raising investment incentives in an even more favorable tax system, reducing the rate of growth of federal spending, and enlarging the scope for the operation of free markets. He suggested that agriculture will have to adjust to a period of relative price stability—an adjustment that will likely last several years. Agriculture will prosper through market orientation in a steadily expanding U.S. economy and open, growing international markets.

Robert Lawrence sharply dissented from the supply-side views put forward by Johnson. Conceding that the Reagan program achieved some important economic gains in its first few years, Lawrence suggested that a "buy-now, pay-later" fiscal policy should not be judged entirely on its recent effects. He called the current stance of macroeconomic policy "dan-
gerously imbalanced' and said it was leading to great near-term pressures on agriculture and other traded-goods sectors. Of even greater concern, he said, was that current trade imbalances could not be sustained, and they will eventually result in a lower standard of living for the United States.

The point of sharpest difference with Johnson was on the effect of foreign capital inflows. Lawrence conceded that if foreign capital inflows fund real capital formation, the stronger exchange rate they create is a short-run problem of no lasting consequence. But he argued that the foreign capital inflow has been absorbed primarily by increased government spending—largely for defense—and increased consumption. Neither greater government spending nor increased consumption will aid in the future servicing of the debts.

Lawrence also took a different view of how capital investment has responded recently to the tax cuts. He cited statistics indicating that nominal and real investment, after depreciation, is no greater as a share of GNP in the early 1980s than in the late 1970s. Moreover, little of the recent investment has been used to enlarge the U.S. industrial base. Instead, he said, it has gone into such areas as office equipment that will not service our international debt sufficiently.

Lawrence concluded that in the long run the United States will not have invested or saved enough to service its growing indebtedness. Americans, therefore, will have to tighten their belts by paying higher taxes and by paying higher prices for imports. He called for a program to increase government revenues and cut expenditures while strength remains in the economy. Such a program would provide immediate relief to agriculture and other traded-goods sectors while, over the long run, allowing the United States to return to a sustainable external balance.

The challenge in building market demand

Dale Hathaway, in "The Challenge in Building Market Demand," considered a lack of growth in world grain markets the central problem for U.S. agriculture. Countering those who attribute farm problems to domestic farm programs or unfair competition abroad, Hathaway stated that the primary problem is the health of U.S. export markets. Unless growth is stimulated there, he said, pursuing other issues will be fruitless.

Reviewing trends in world grain markets, Hathaway concluded that the growth in the world market for grains has been concentrated increasingly in developing countries. Both the China market and the EC market have been lost to internal production, and centrally planned economies—once thought to be a great growth market for the United States—have not contributed to market growth since 1975. The internal market growth of our traditional competitors (Canada, Australia, and Argentina) also is down, pushing more of their increasing production into export markets.

The slowdown in economic growth in developing countries over the past five years, then, is the basic reason for the sharp decline in world grain trade and U.S. farm exports. Hathaway further suggested that the problem is far more difficult to fix than to understand. One response the United States could make would be to offer export credit to the financially stressed importers. But additional credit does not solve a country's internal income problems or increase real demand.

He concluded, therefore, that the only real solution to the current stagnation in world grain markets is to stimulate income growth in the developing countries. He suggested five steps the United States could take to improve income and food demand in developing coun-
tries: to restructure or write down the external debts of the countries, to reduce the exchange value of the dollar, to reduce U.S. interest rates, to maintain open markets for the exports of the debt-burdened countries, and to establish incentives for new capital to flow to those countries. He admitted that a solution drawn from these steps might be difficult in execution and slow in producing results, but he saw no quick-fix alternatives.

Discussing Hathaway’s paper, Orville Freeman argued that food aid development programs of the past offer a prescription for agriculture’s current problems. He pointed to the successes of the P.L. 480 (Food for Peace) program as evidence that a solution to low farm prices and surplus in the United States and starving people abroad can be found simultaneously. Specifically, P.L. 480 was designed to get food to starving people, to stimulate third world economic development through improved agricultural productivity, and to develop U.S. export markets on the premise that growth in income and food demand will outstrip growth in domestic food production. Freeman asserted that this strategy has been successful before and it should be followed again.

Also discussing Hathaway’s paper, Jerry Hiegel agreed that inadequate market growth is the main problem for U.S. agriculture to solve. Many of agriculture’s current difficulties can be traced to unusual events in the 1970s, including oil price shocks, that disrupted normal markets. Hiegel argued that the development of international markets must begin with the development of sound producing economies. Moreover, a more complex and extensive infrastructure is needed to support the demand for more livestock products as incomes improve in developing countries.

**Summary**

Symposium participants agreed that the ability of American agriculture to compete in the world food market will be important in determining whether the industry can overcome many of its current financial problems. Most agreed that agriculture’s competitiveness has been impaired over the last five years by a much stronger dollar, farm programs that put support prices too high, and economic distress in developing country trading partners. Disagreement arose over which of these factors has most impaired competitiveness.

Participants generally agreed that American agriculture could become more competitive, but only if a number of important public and private steps are taken. Public policymakers must pursue balanced economic policy that encourages economic growth abroad and keeps the dollar from becoming excessively strong. Farm policymakers must pursue farm programs that are flexible and recognize world market forces. And America must maintain its edge in biotechnology through ongoing public and private support for research and development. The consensus view was that even if all these steps were taken, U.S. agricultural exports may grow only slowly for the foreseeable future.
COMPETING IN THE WORLD MARKETPLACE: THE CHALLENGE FOR AMERICAN AGRICULTURE

American agriculture is undergoing a drastic adjustment. A major force behind the adjustment is competitive pressure in the world market for food and fiber. In the 1970s, farmers and agribusinesses thought they could readily supply an evergrowing world food market, and in the process find solutions to farm problems that were decades old. But in the 1980s, American agriculture has learned that world markets can be extremely competitive and that economic growth abroad is very important if U.S. farm exports are to be expanded.

How can U.S. agriculture better compete in today's world food and fiber market? That is the challenge the industry faces if prosperity is to be restored.

To provide some answers to this critical question, the Federal Reserve Bank of Kansas City brought together a distinguished group of agricultural experts from industry, government, and universities for a two-day symposium on "Competing in the World Marketplace: The Challenge for American Agriculture." The symposium was held at Kansas City, Missouri, on October 31 and November 1, 1985.

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