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INTRODUCTION TO COMPETITION IN THE FOOD-FIBER SYSTEM

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The current Journal of Agribusiness addresses the issue of the competitiveness of the United States and its regions in the domestic and international markets for food and fiber products. Basically, these are products of biological origin and are renewable in relatively short time periods.

This introductory paper provides insight and understanding of competition and its role in the economy, and the factors that contribute to competitiveness. "Competitiveness" is simply the ability to compete. It is generally used in the context of ability to compete for specific markets for specific goods and services.

THE ROLE OF COMPETITION

The global economy is a complex maze of interdependencies and forces that create and distribute wealth -- defined as those things that are created from the raw materials of nature that provide sustenance, comfort, convenience and pleasure. The emphasis is on people as it is people that create and enjoy the benefits of wealth. Poverty is simply an absence or deficiency of wealth or access to wealth -- much the same as cold is a deficiency of heat and dark is a deficiency of light. Food, fiber and kindred products contribute to all attributes of wealth but with emphasis on sustenance, the first requirement of an economic system.

The global economy was not mandated, and is somewhat mystical in character in that no master plan or commander-in-chief guided its development. The earth is a closed economy -- receiving only energy from external sources -- with finite resources; yet, the creation and distribution of wealth has no limits. Intelligence (embodied in people), imagination, ingenuity and innovation act in consort to expand the bounds of wealth creation and distribution.

Competition likewise is not mandated -- rather it is inherent in the nature of people. People as individuals, groups, organizations, institutions and nations compete with each other. Competition is both good and bad. It is good in that competition is a driving force that creates and distributes wealth. It also prevents or constrains the exploitive powers of monopolies and cartels.

Nevertheless, competition is bad when it is not tempered with compassion and recognition of the rights of others. The extreme evil of competition is manifested in wars and/or military-political confrontations among nations. Competition is also labeled as bad when the rules of fair play and moral codes are violated to gain a competitive edge. Governments provide and enforce the rules of fair play in domestic economies, but there is no world government to provide and enforce the rules of fair play among nations. In addition to military-political confrontations, nations also engage in an array of trade wars including subsidies, tariffs, quality restrictions, etc. Trade restrictions among nations usually revolve around the issues of protection of domestic industries (including food and agriculture), and national security (including food security).

Fair competition and its companion, "fair trade", among all people and nations enhance the creation and distribution of wealth. Trade among nations is complicated by a maze of currencies and currency exchange rates. In addition to trade restrictions, this also limits the benefits of a global competitive system.

FACTORS CONTRIBUTING TO COMPETITIVENESS

A nation's or region's competitiveness (competitive position) in domestic and global markets is conditioned by several factors including: 1) natural attributes, 2) technology, 3) organization, and 4) policy.

Natural Attributes

Climate, soils, water and other natural resources play an essential role in the production of foodstuffs, fiber and kindred products of biological origin. Nations and regions with abundant fertile, arable land, an adequate growing season, and adequate precipitation generally have a comparative advantage in crop production. Some crops require a near frost-free climate, and others require mild temperatures during the growing season for high yields and high quality. Areas with desirable climatic and soil attributes -- but with inadequate or poorly distributed precipitation -- may produce bountiful harvests with supplemental irrigation. This, however, requires technology, capital and a reliable source of irrigation

water. In fact, a relatively dry atmosphere with irrigation may contribute to both high yields and high quality. Animal performance also may be enhanced by a dry, mild climate -- cattle feeding being an example. Also, poultry production is concentrated in milder climates.

Technology

Productivity and competitiveness are enhanced by the development and adoption of superior technologies. The early adopters of superior technologies hold a competitive edge until these technologies are widely diffused. Hybridization of corn gave the United States a competitive edge in feed and industrial grains which translated into a competitive advantage in animal products -- milk, beef, pork, poultry meat, eggs --, and industrial products -- alcohol, starch, fructose sweetener, etc.

Mechanization of agriculture in the early and mid-20th century gave the United States a competitive advantage in world markets. It also contributed to rapid industrialization in most sectors of the economy, and the commercialization of agriculture via reduced farm labor requirements.

The development and adoption of bio-technologies will provide a competitive advantage to the early adopters. Nitrogen fixation in cereal grains, increased photosynthetic efficiency in plants, growth hormones to increase milk yield, twinning in beef cattle; and increased frost, drought, humidity, disease and insect resistance in plants are among the more promising bio-technologies of the future. The early developers and adopters will gain a competitive advantage in the last decade of the 20th century and in the 21st century.

Organization and Management

A highly skilled (educated) labor force and entrepreneurs are essential to achieve optimal productivity and competitiveness throughout the vertical infrastructure. Computer hardware and software enhance organizational and managerial skills, provide readily available information on markets and inputs, facilitate price discovery and exchange, develop optimal transportation and storage strategies, etc.

Finance and Capital

The competitive position of nations and regions in national and international markets is critically affected by the availability and cost of financing. Reliable, adequate and relatively low cost financing is necessary to implement emerging technologies and to off-set rising labor costs. A nation's or region's

competitive position is weakened by a combination of high-cost labor and high-cost capital, as was the case of the U.S. economy in the 1980-85 era.

Policy

Governments can enhance the competitive position of its entrepreneurs by providing a fair and equitable production and exchange environment. All civilized games are played with rules and officials. Product reliability, quality and safety are essential to a viable food-fiber system. Governments may play a major role in 1) reducing uncertainty with price support, supply management and commodity storage programs, 2) developing and disseminating technical information and superior technologies to its farmers and other entrepreneurs, 3) providing financing through a central banking system, 4) developing and disseminating market information, and 5) providing superior education and skills to its people.

SUMMARY

Competition is the driving force in creating and distributing wealth. However, competitive forces must be tempered by compassion, recognition of the rights of others, and the rules of fair play. Nations compete for global markets -- including each nation's own domestic markets. Moreover, distinctive regions within large nations compete in both the domestic and international markets.

Competitiveness or competitive position (advantage) is attained through the avenues of: 1) natural attributes such as climate and soils; 2) technologies used in production, fabrication, preservation and distribution; 3) organization and management skills of farmers and other entrepreneurs in the food-fiber system; 4) financing; 5) government policies and programs; and 6) efficient and reliable exchange and transportation systems.

These factors are essential to an assessment of the competitive position of the United States and its major regions in domestic and international markets. Papers included in this issue are based on the current state of knowledge. However, the data are generally inadequate for definitive quantification. Additional research is needed to adequately address this important issue.

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