International trade in fruits and vegetables has expanded more rapidly than trade in other agricultural commodities, especially since the 1980s. Although fruits and vegetables now claim a significant share of world agricultural trade, little research has been done on the global patterns and dynamics of this trade. The category “fruits and vegetables” encompasses a great variety of commodities, each with its own characteristics and institutions. Despite this variety, some trends, and the forces behind them, appear to apply to a large number of fruits and vegetables. The purpose of this study is to explore those trends and causes over the last decade. The report is presented as follows:

**Overview of Patterns of the Global Fruit and Vegetable Trade.** Fruits and vegetables have claimed an increasing share of world agricultural trade, from a nominal value of $3.4 billion (10.6 percent) in 1961 to nearly $70 billion (16.9 percent) in 2001. The variety of offerings has increased as well. Bananas, apples, oranges, and tomatoes accounted for over 30 percent of the total fruit and vegetable trade in the 1960s and 1970s, but by the end of the 1990s they accounted for less than 20 percent. Fresh grapes, fresh vegetables, frozen potatoes, tree nuts, and other fruit and vegetable products are entering world trade channels in increasing quantities.

Several trade flow patterns emerge. Most trade in fruits and vegetables occurs within a few geographic regions—the European Union (EU), the North American Free Trade Agreement (NAFTA) countries, and Asia. Typically, each of these regions has high-income consumer countries, with nearby supplier countries that may or may not be high-income but that have suitable climates or other factors for producing—or facilitating—exports. For example, imports within the EU flow mostly to Britain, France, and Germany, and the largest exporters are Spain (for its produce) and the Netherlands (through whose seaports many of the exports are shipped). The United States accounts for most of the fruit and vegetable imports within NAFTA, and Mexico is the main exporter. In Asia, Japan is the largest importer and China the largest exporter.

In addition to its intraregional aspect, the trade in fruits and vegetables has become increasingly globalized since the 1980s as remarkable technological developments have expanded its dimensions. With large volumes of fruits and vegetables moving from one continent to another, the seasonality of produce markets is greatly reduced. A prime example of this global trade boom is the counterseasonal imports by the Northern Hemisphere from the South. **Global Trade Patterns in Fruits and Vegetables**

**Introduction**

Sophia Wu Huang*

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*Sophia Wu Huang, the coordinating author, is an economist with the Market and Trade Economics Division, Economic Research Service, U.S. Department of Agriculture.

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1 The European Union in this report refers to the 15 countries who became members before 2004: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and United Kingdom. As of May 1, 2004, there are 10 additional members: Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia.
Southern Hemisphere, which make a year-round supply of fruits and vegetables possible for northern consumers. Another example is the rise of East Asia—particularly Japan—as an attractive market for global exporters, notably the United States.

Determinants of Trade. The expansion of global trade in fruits and vegetables is related to supply and demand, institutional and economic factors, and national, regional, and international characteristics. In particular, in combination with changing consumer preferences as incomes rise, advanced technology and trade agreements have played large roles in allowing access to markets, breaking through old constraints of climate, location, and growing season to encompass what is truly a global market. In turn, globalization has fomented change in wholesale and retail markets around the world, providing consumers with an expanding array of fruit and vegetable varieties year-round.

The Major Players. The study delves into the domestic markets and trade experiences of the main fruit and vegetable traders—the EU, NAFTA, China, and Japan—in order to better understand how economic and institutional factors in these countries affect patterns of trade. Individual chapters are devoted to:

- **The EU**, the leading destination and source of supply in the global trade of fruits and vegetables. In the EU, a customs union, all member countries have not only a common tariff for third countries, but also a common market organization, with policy mechanisms and trade agreements to stabilize markets for their fruit and vegetable sector. Implications of both the domestic and external policies of the EU for the fruit and vegetable trade will be analyzed.

- **NAFTA**, whose three members—Canada, Mexico, and especially the United States—are very important producers, consumers, and traders of horticultural products. North American trade in fruits and vegetables has flourished under NAFTA. The chapter looks at the trade flows and related policy issues as they affect commerce in fruits and vegetables.

- **Asia: China and Japan.** As a growing competitor in export markets, particularly in Japan, China is a chief actor in the global fruit and vegetable trade, with potential to become a key importer as well. The large population of Asia does not play as much of a role in determining trade as the income level of the countries, which is why Japan stands out as an importer. Japan is a harbinger of what other Asian countries may become, and its market is very important for understanding future U.S. trade with Asian markets.

Conclusions. The trade environment for fruits and vegetables has changed dramatically over the past decade and further change is likely. The report concludes with a discussion on shifts in consumer preferences and demographic characteristics, trade agreements, information technology, and the structure of the global fruit and vegetable market, which will have critical implications for fruit and vegetable trade.