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Production Agriculture in Transition - The Fresh Fruit and Vegetable Sector

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Introduction

It's a pleasure to talk with you about the fruit and vegetable sector, because the marketing of these commodities brings you directly in touch with consumer and food distribution trends – making it especially dynamic. In other words, unlike agricultural products that are used as ingredients, such as soybean meal, consumers vote directly with their money about the consumption of fresh fruits and vegetables. While fruits and vegetables are consumed in both fresh and processed forms, the more exciting changes are happening on the fresh side – so that's what I will focus on today. Incidentally, unlike the other speakers, I am going to highlight international issues, since there are some unique things going on in this arena for the fresh fruits and vegetables sector.

World demand, supply and trade of fresh fruits and vegetables is on the rise. Global trade in these commodities surpasses $40 billion and world production totals approximately 1 billion tons. It's always difficult to generalize about fresh fruits and vegetables because over 200 commodities are produced around the world. However, there is a good degree of specialization in production and trade, both in terms of the commodities and countries involved. Let's take a quick look at the global industry.

The top producers are frequently not the top exporters, and vice versa. For example, China, India and Brazil, alone, account for 30 percent of world fruit supply, but their impact on the world trade scene is minimal. In contrast, countries like Chile and New Zealand, with small domestic markets, are totally export driven. The U.S. and the EU are both major producers and major traders. As a single country, the U.S. is the largest importer and exporter of fresh fruits and vegetables (combined), with a trade deficit of about $1 billion. As a group, the EU-15 is the largest importer with a 1996 trade deficit of 5 billion ECU.

If we consider just fresh fruits, Spain is the largest exporter in the world, due to its dominant position in fresh citrus. By the way, for those of you from Spain, you may be interested to know that while both Spain and the U.S. face growing competition in the orange and lemon sectors, Spain still controls over 55 percent of world tangerine trade – a very high concentration ratio, indeed!

Exports were traditionally a small share of the market for perishable fruits and vegetables (albeit varying widely by commodity and country), owing in large part to trade barriers and the technical difficulty and expense of long-distance shipping. Trade liberalization has recently expanded market access and provided strengthened mechanisms for combating non-tariff trade barriers, such as scientifically unfounded sanitary and phyto-sanitary restrictions. Furthermore, major advances in post-harvest handling technology have improved control over the cold chain, a necessary condition for long distance shipping of highly perishable commodities.

So, the big news in the fresh fruits and vegetables sector is that technical possibilities have combined with demand and supply side factors to stimulate expanded and less specialized horticultural trade flows, involving more diverse commodities, countries, and marketing channels. Specifically, it is the growing global demand for year-round availability of a broader line of high quality fresh fruits and vegetables that is stimulating trade, since no country produces suitable quantities and qualities of all fresh fruits and vegetables in every week of the year.

As of the 1980s, growing import demand for year-round availability of a more diverse array of fruits and vegetables in industrialized nations, has been stimulating supply from developing countries. However, the table is beginning to turn as we approach the next century. The U.S. and European horticultural sectors are increasingly export driven as these markets mature, and demand for many items expands more rapidly abroad than at home. As income levels rise in developing countries, consumers tend to shift away from starchy diets toward diets richer in animal proteins, fruits and vegetables, demanding their year-round availability, as well as greater quality, product diversity and more value-added product forms.

Recent trade liberalization among developing nations has permitted U.S. and European exporters to respond to the emerging demand for fresh fruits and vegetables in some of these markets, generating new competition for their domestic producers. Trade where none had existed is raising the competitive bar and causing new trade disputes. Witness Mexico's recent restrictions on the importation of U.S.

apples, and Brazilian restrictions on stone fruit imported from the U.S. Watch for more of this type of dispute!

Fresh fruits and vegetables is still one of the key commodity arenas in which the “drama” of sanitary and phyto-sanitary disputes unfolds. With lower tariff barriers sanitary and phyto-sanitary restrictions will be the name of the game in the future. These also include technical standards related to food safety issues. To fight these battles producers are frequently organizing, since organized producer commodity groups are the most successful at influencing their government officials to defend their trade interests. More and more, methods used by producers in industrialized countries to restrict imports are being mirrored by developing countries. As the old adage goes, “what goes around comes around.”

Expansion of Industrialized Agriculture

So, the trend over the last decade toward economic and trade liberalization, in conjunction with changing patterns of consumer demand, is affecting the direction of horticultural trade and creating new economic interests. New entrants and more players are attempting to both capitalize on and contribute to these trends.

Strategic alliances and joint ventures are allowing small and medium size fresh fruit and vegetable firms to "go global" and both source in more countries and expand markets, without necessarily becoming multinational firms. The entrance of nontraditional firms to international trade, such as grower-shippers, as opposed to traditional importers and exporters, is diversifying international marketing channels.

In addition, a few multinationals and long time international traders are striving to develop truly global brands and diversify product lines (e.g., Dole, Del Monte, Chiquita). However, the perishable nature of fresh fruits and vegetables greatly increases marketing risk. The high level of price volatility at the fresh fruit and vegetable shipper or supplier level, doesn't lend itself to dominance by publicly traded companies – since they must be concerned with quarterly profit reports to shareholders.

Therefore, despite the entrance of multinational food processors to the production and shipping levels of the fresh fruit and vegetable industry during the 1980s, a sizable portion of fresh fruit and vegetable

sales at the first-handler level still remains in the hands of relatively specialized, frequently privately held firms.

Formation of Food Supply Chains

Consolidation of buyers is occurring throughout the global food distribution system, led by Northern Europe and the U.S. In the U.S., the top 10 integrated wholesale-retailers account for around 60 percent of 1998 food sales. In Northern Europe concentration ratios are much higher. Consolidation increases the demand for consistent volumes and qualities of fresh fruits and vegetables, causing firms to introduce procurement methods that manage the supply chain more efficiently. The focus is on adding value and decreasing costs by streamlining distribution and understanding customer needs.

Buyers are increasingly developing partnerships with preferred suppliers to be assured of the availability of fruits and vegetables which meets their specifications on a week-in, week-out basis. Larger buyers drive consolidation at the supplier level, since shippers must attempt to somewhat match the scale of their customers in order to serve them efficiently. The emergence of larger scale suppliers means that a few select firms meet the "test of capital," and can incur the costs and risks associated with producing crops in several regions or countries over extended periods.

For example, a few large lettuce grower-shippers headquartered in Salinas, California, ship out of two other California valleys to achieve year-round volume, controlling two-thirds of the nation’s supply. While the world-wide table grape industry is still rather fragmented, this international sourcing and marketing model applies. California table grape grower-shippers not only produce grapes in California during the summer and fall for world-wide sales, but they may also have joint ventures with Chilean producers in order to manage the supply chain on a consistent year-round basis. There is Italian investment in the Chilean table grape industry as well. Similarly, some Spanish shippers may produce in more than one region of Spain, as well as in the Canary Islands or Morocco in order to extend seasons. Consistency of supply over extended seasons has, in and of itself, become a source of strategic competitive advantage for many shippers.

This model is being adopted in Latin America to better serve the growing domestic supermarket sectors in many of these countries. For example, in Argentina, supermarket chains now account for over two-thirds of food sales and are exerting growing buying power. In Mexico, the supermarket sector's share

of food sales surpasses fifty percent and is growing rapidly. Hence, several large Mexican and Argentine vegetable growers produce in more than one location to supply the chains year-round.

In other words, this multi-location and joint venture model is being applied both among and between fresh fruit and vegetable producers in both developed and developing countries, driven by supply chain management. Increasingly, forward-integrated grower-shippers with the ability to source regionally, nationally and globally, theoretically earning profits at all stages of the process, are at an advantage relative to stationary growers operating in only one location.

Development of Differentiated Products

Product differentiation and new product introductions are key strategies for expanding sales, including in the fresh fruit and vegetable sector. For example, the fresh tomato category has been differentiated to over 10 offerings. The introduction of specialty fresh fruits and vegetables has benefited small domestic producers, especially in the U.S., and opened new export markets for tropical and subtropical producers as well.

Fresh fruits and vegetables are increasingly being lightly processed and sold in fresh-cut form, such as bagged salads or carrot or celery sticks. The fresh-cut fruits and vegetables wave began in Europe, crossed the Atlantic to the U.S., and is even emerging in Latin America and Asia, soon to become a global phenomenon.

However, appearances can be deceiving. While the fresh fruit and vegetable industry has indeed struggled to differentiate its products, the perishability factor and the difficulty of controlling intra- and inter-seasonal volumes and qualities, has made this a real challenge. In reality, the dynamics of fresh fruit and vegetable markets are still commodity-like, with firms remaining price-takers.

Increased Environmental Regulation

Environmental issues are increasingly influencing production and marketing practices everywhere, not just in industrialized countries. Consumer concerns about the environment and food safety have stimulated a rapidly developing market for organically grown fresh fruits and vegetables. Although organics still represent under 2 percent of total fresh fruit and vegetable sales, demand is growing rapidly.

In Europe, organic agriculture is being seen as a method to help governments resolve some environmental problems. In Austria, 12 percent of farmland is now in organic production. Scandinavian countries and Switzerland are also leaders in organic production, while in the U.S., Italy, Spain, the U.K. and the Netherlands, under one percent of agricultural area is engaged in organic production. Nevertheless, the organic industry has become a firmly established niche. Keep in mind, however, that while there are growing consumer segments in both Europe and the U.S. that SAY they want to shop in support of the environment and organic farming, in reality, they don't want to dip too deeply into their pockets to do so. So, prices and margins must come down for this market to evolve out of the niche category.

In the U.S., the largest single import market for fresh fruits and vegetables, loss of registered pesticides is causing coalitions of producer and environmental advocacy groups to lobby for similar pesticide use standards in foreign countries supplying the U.S. market. Producers in many countries are concerned about the ability of producers elsewhere to gain a competitive advantage from less restrictive environmental practices, while environmentalists have their own motivations. Environmental politics makes strange bedfellows!

Continued expansion in the number of countries and firms involved in the international trade of more fresh fruit and vegetable items, means that firm-level competitive pressures will mount, and environmental issues will be linked to the debate. In the long run, the importance of international trade to agriculture means that environmental standards and practices will tend to be harmonized. Powerful lobby groups will see to that. The playing field will be leveled upward, NOT downward, and trade will continue.

Emergence of Information Intensive Production

Precision agriculture techniques are also growing in importance for fruit and vegetable producers, having been rapidly adopted in California agriculture, in particular. For example, melon and lettuce seed varieties are now developed for precise growing conditions in locations with the micro-climates that enable producers to hit lucrative market windows.

To summarize, it is clear that to compete in the fresh fruits and vegetables sector, producers around the world will need to use technology, supply, weather and marketing information as efficiently as possible in order to minimize costs and maximize market potential.