Alternative Markets for Fruit: Organic and IFP

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Agricultural products of all sorts are in oversupply on a global basis, driving prices paid to producers to record low levels in many areas. At the same time, consumer interest in how food is produced is rapidly increasing in certain sectors, as evidenced by the 20% annual growth in organic food sales in the US and Europe over the past six years. Thus, producers face two opposing trends in developing their strategy for economic survival – expand and attempt to drive down production costs faster than others, or target production to specific value-added markets and produce only what those markets want. Doc and Connie Hatfield, founders of Oregon Country Beef, a cooperative of ranchers in central Oregon selling natural beef, suggest that family farmers will have to "decommodify" if they are to survive. They must change their product from a faceless, low value item to a differentiated product that carries its identity all the way to a consumer who sees special value in it and is willing to pay more for it.

Most marketing of food products, as well as other products, emphasizes product attributes, such as size, color, and variety as in the case of apples. The success of new apple varieties illustrates the potential to develop new market segments based on flavor. At the same time, certain groups of consumers are interested in the production process attributes of foods. How was it grown (e.g., pesticide use, labor practices, impacts on wildlife, use of genetic engineering? Where was it grown (e.g., local, regional, family farm)? These attributes generally do not influence the resulting product attributes, but can add value to a product nonetheless. Currently, two major market niches for production process attributes exist: the organic foods market, and the market for fruit from Integrated Fruit Production. These two opportunities will be explored below. But first let's take a look at the consumer, the key to demand.

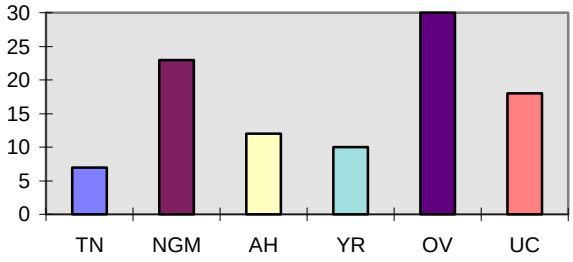
Do Consumers Care?

Various surveys of environmental attitudes have been conducted in recent years, some aimed at policy issues and others at commercial opportunities. The study by The Roper Organization (Roper, 1993) looked at consumers in the North American market (Canada, U.S., Mexico). Populations were segmented into 5 categories of varying environmental awareness, concern, and action. When asked if they had bought a product labeled as environmentally safe or biodegradable, consumers responded positively from 77% for the True Blue Greens, the most environmentally concerned, to 19% for the Basic Browns, the least environmentally concerned. The survey concludes that the level of "green" purchasing (all products, not just food) correlates well with the attitudes of the segments. The True Blue Greens most often act on their values, and thus "green" marketing needs to be targeted towards groups such as them.

In 1996, The Food Alliance, a private non-profit group funded by the Kellogg Foundation to explore market incentives for sustainable agriculture, sought to further this understanding of environmental attitude and purchase intent specifically for food products. The Hartman Group, a market research firm specializing in environmental

marketing, conducted a national consumer survey in several phases (Hartman, 1996; Hartman, 1997a). Phase 1 was a segmentation survey sent to 2,900 households that were part of the National Family Opinion pool. Of these, 1,766 usable surveys were analyzed. Six segments were identified based on attitudes towards food, agriculture and environment, and named (Figure 1).

Figure 1. Segments of total population by environmental attitude (in percent) (Hartman, 1996).



TN = True Naturals
NGM = New Green Mainstream
AH = Alternative Healers
YR = Young Recyclers
OV = Overwhelmed
UC = Unconcerned

Half the respondents had no interest in the topic or were unconcerned (Overwhelmed, Unconcerned). Respondents from the other four segments, representing 52% of the population, expressed an interest in food products labeled for their environmental attributes. The most promising segment for mainstream mass market appears to be the New Green Mainstream, at 23% of the population. The True Naturals (7%) represent existing core organic food purchasers, and they are likely to demand the standards of organic over other possible ecolabeling standards. However, they are the group most open to price premiums, as they already pay them in many cases. Other estimates of the market share for organic foods generally range from 10-15%, depending on the assumptions about price premiums. Still, most consumers do not include environmental attributes as core purchase criteria (price, quality, availability, etc.) for food.

A second survey was sent to consumers in the four segments who expressed interest in ecolabeled food. It explored environmental and agricultural issues in greater detail. In general, water was the environmental issue of greatest concern to people (Table 1).

Table 1. Importance of environmental sector - percent top 2 box responses (Hartman, 1997).

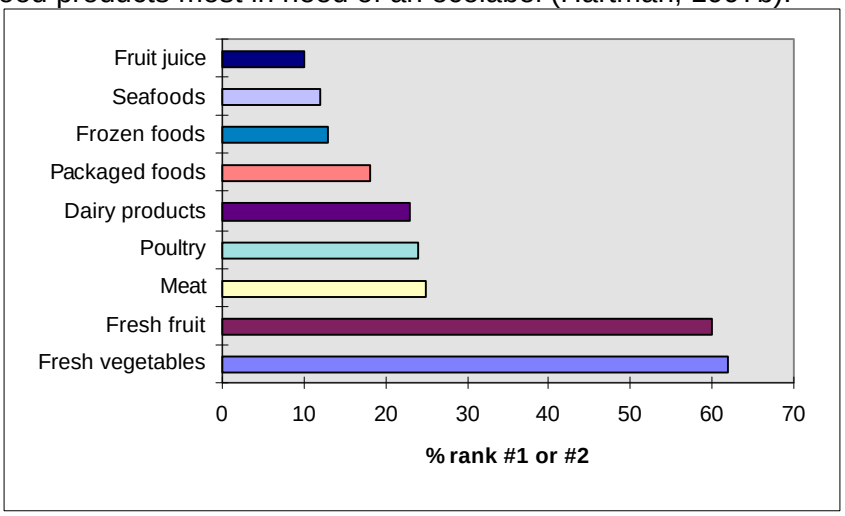
Environmental Sector	**Total**	**TN**	**NGM**	**YR**	**AH**
Water	57	42	60	56	61
Air	22	25	16	21	30
Habitat	11	15	13	12	4
Soil	6	10	6	5	4
Energy	5	8	5	6	2

Pesticides were also of high concern, but tended to represent a personal health issue more than an environmental issue. Respondents clearly supported hypothetical ecolabel programs that included water and soil conservation along with IPM more than

either one alone. IPM without some promise of pesticide reduction received little support.

The Food Alliance's consumer research suggests that a significant market potential exists for food products differentiated by production practice attributes. These products, however, need to be clearly targeted to match both the psychographics of a population segment and their key values related to food and environment since there are many shades of the "green" consumer." Follow-up work indicates that consumers would respond strongest to an ecolabel on fresh fruit, fresh vegetables, and meats (Figure 2). The survey suggests that most interested consumers don't expect perfection in terms of environmental performance, but will not tolerate deception. Thus, messages communicating "sustainability" to consumers must be carefully crafted to be accurate and understandable.

Figure 2. Food products most in need of an ecolabel (Hartman, 1997b).

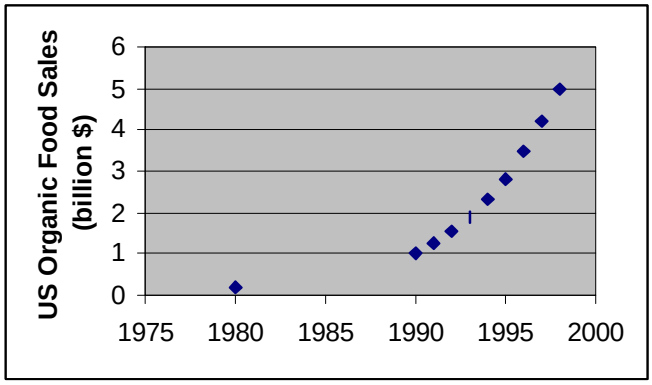


Opportunities for Organic Foods

As mentioned in the introduction, sales of organically produced foods have grown rapidly during the past decade (Figure 3). Organic is a marketing label that denotes a specific type of production regime, one that generally avoids synthetic inputs (e.g., pesticides, fertilizers) and relies on natural processes (e.g. crop rotation, biocontrol) or natural products. Many organic certification programs exist, with slight variations in rules, but all with strict standards to guarantee that the product a consumer purchases is indeed from an organic farm.

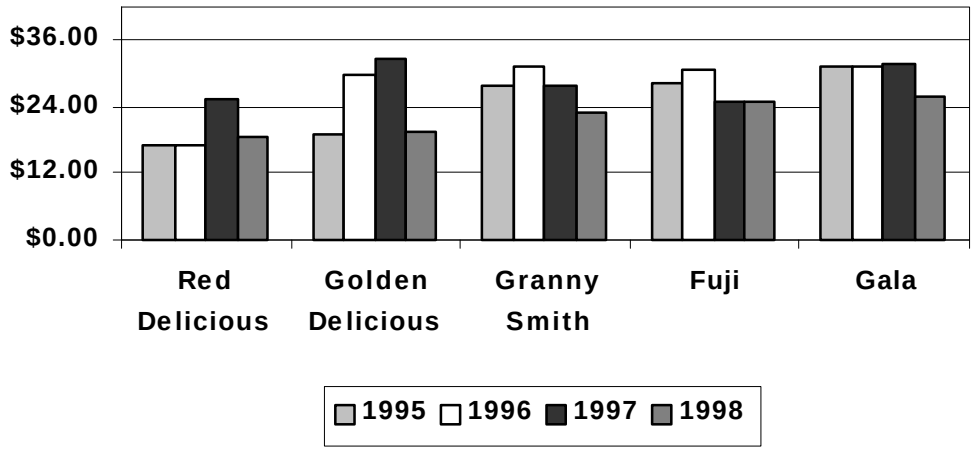
In Washington State, the acreage of organic tree fruit production has nearly tripled in the past five years, and will double again with the acreage pending certification. In 1999, there were about 3000 acres of certified organic apples, and over 3700 acres of apples in transition to organic (Granatstein and Dauer, 2000). The semi-arid climate of Washington and other Western states accounts for this region's dominance in organic fruit and vegetable production.

Figure 3. Organic Food Sales in the U.S. (source: Organic Trade Association)



Red Delicious is the dominant variety of organic apple at present, despite indications that organic consumers do not favor this variety as much as Fuji and others. Recent downward pressure on the FOB price for organic Red Delicious suggests that excess supply may be developing. However, prices for other varieties have generally exceeded those in the conventional market and have provided greater returns for growers, even with the higher production costs for organic fruit (Figure 4). With current organic food sales representing about 2% of total food sales, there is still room for growth to fill the demand estimated at 10% of the population. And if the price difference between organic and conventional shrinks, then demand can be expected to grow. Lower returns to growers may cool the interest in organic production. But organic growers will face fewer regulatory problems in the future and may be able to couple the organic label with other attributes to retain a high-value niche market.

Figure 4. Organic apple prices ($/ packed box FOB) by variety, Washington State. (Granatstein and Dauer, 2000)



Integrated Fruit Production (IFP) Experience

Integrated Production was developed in Europe during the 1970s in response to growing ecological problems in agriculture, especially pest resistance to pesticides. This coincided with the early development of organic farming in the U.S. Integrated Fruit Production programs have been developed that cover all aspects of fruit farming with guidelines for desirable and prohibited practices (IOBC, 1993; IOBC, 1994). By 1995, approximately 40% of the apple and pear acreage in Europe was being managed under an IFP program, in response to regulatory pressure, government incentives, and market signals.

A number of large grocery companies began preferential sourcing of IFP fruit (e.g. Migros, Sainsburys). This move pressured producers in exporting nations (e.g. South Africa, Argentina, New Zealand) to develop IFP programs to retain access to European markets. However, growers have not received premium prices for their IFP fruit. Instead, they have benefited, if at all, from cost savings uncovered in IFP programs and from government "green" payments. And now, some grocery chains are replacing IFP with organic (e.g. Coop). Thus, while adoption of IFP in Europe and elsewhere has been very successful, IFP has not delivered a meaningful return back to growers in most cases.

There is growing interest in integrated production programs in the U.S., often referred to as ecolabels. These tend to focus on production attributes that are not stressed by organic programs (e.g. soil and water protection, wildlife, labor), and are generally less prescriptive than organic programs. The programs project a positive message about agriculture and may appeal to the New Green Mainstream consumers, but not the organic consumers. In a few instances, growers in these programs have received price premiums (e.g. beef, vegetables, dairy), but more often the benefit is in improved market access. With the broad awareness and increased availability of organic foods, the societal pressure for an IFP program in the U.S. appears to be much less than in Europe. However, given the growth in organic farming, there are opportunities for organic growers to participate in other ecolabel programs to further differentiate their products in an attempt to retain a premium in face of increased supply and downward price pressures.

Opportunities for Washington Apples

By virtue of its climate, Washington State is a premium region for the production of fruit based on environmental attributes as well as product quality. The industry can take advantage of this by enhancing support for marketing to the "green" consumer. "Wellness" is considered a major consumer trend for the next decade, and Washington apples can satisfy this with a product that is healthful to eat and not harmful to the environment. More and more consumers want to know where their food comes from. Washington apples already have a geographic identity built in. But instead of just thinking of a red apple, consumers could also think of Washington apples as "green". And information technology can be used creatively to further link consumers with growers, as done in Denmark with bar codes on meat packages that can be scanned on an in-store computer to bring up a photo and text about the farm that the beef came from. Market niches are growing in both mass market and alternative food systems (e.g.

direct marketing), and both should be pursued to strengthen the value of Washington fruit.

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