New paradigms in apple fruit production—Core issues affecting the futures of fruit growers

Stuart Tustin

HortResearch, Hawkes Bay, New Zealand

Presented at the 46th Annual IDFTA Conference, February 17-19, 2003, Syracuse, New York

The international fresh apple trade in the 1990s has seen many of the traditional industry business models, relationships and marketing systems undergo fundamental change. The emergence of new paradigms in the fresh fruit marketing is driving changes in fruit production methods and how fruit growers will operate and organize their businesses in the future.

WHAT CHANGED IN THE 1990S?

International fresh apple supply expanded in the major Northern Hemisphere markets exceeding demand from the mid-1990s. General oversupply of apples coincided with much increased international supply of premium value "new" cultivars like Gala, Fuji, Braeburn and Jonagold. International apple markets reached a state of hypercompetition under these conditions and traditional competitive advantage of production regions based on climate, timing and exclusivity was eroded.

The balance in marketing relationships shifted strongly in favor of "buyer-strength" caused by oversupply and increasing aggregation of supermarket chains into fewer large mega-groups with strong influence over large segments of consumer buying. As part of that change to marketing relationships, a new specialist participant emerged—the category manager—conducting all procurement, supply and quality control of a small range of fruit categories usually for only one or two supermarket mega-groups. These innovations have reduced the wholesale market from hundreds of people procuring fruit to the majority of the supply into retail stores being controlled by a very small number of category managers today.

In the competition for market share, megagroups are increasingly using sophisticated consumer positioning of fresh products as points of differentiation—"best apple eating experience," environmental and safe food guarantees, Integrated Fruit Production, Organics—with concurrent development of in-house quality specifications. Through category management, the mega-supermarkets have exerted influence down the supply chain to increasingly implement their in-house fresh fruit specifications back at the production end of the market chain.

Category management first developed most extensively in the UK market but is also strongly established in Europe and North America. The role of independent fruit marketing companies of the megasupermarket groups has enabled them to take increasing control of specification of apple quality standards.

is changing toward one of category management, indicating fundamental changes to fruit marketing mechanisms and relationships.

Effects of these changes are very evident among the Southern Hemisphere apple exporting countries South Africa, Chile, New Zealand and Argentina. These industries are very "change oriented" and responsive to the demands of new marketing landscape because of their dependence on UK, EU, North American and Asian markets. The extent of change forced by the consolidated buyer strength is driving innovation in new production technologies, product innovation, industry capabilities and infrastructure to meet these new market demands and relationships. And in the major Northern Hemisphere production regions the same pressures and changes are occurring in their apple industries.

IMPACTS OF CHANGES IN FRESH PRODUCE MARKETING ON FRUIT GROWERS Production technologies

Historically apple quality and market presentation standards were set and managed by the production sector and their marketing organizations. The producer industry controlled apple quality entering the market. In oversupplied markets, the buying power of the mega-supermarket groups has enabled them to take increasing control of specification of apple quality standards. The future scenario will be market quality standards increasingly specified by the fruit retailing sector. Standards are becoming much more broadly based and will encompass

factors unrelated to the practical issues of apple production, storage and distribution to customers.

The Environmental Dimension of Quality

The "environmental" dimension to fruit quality has grown in recent years as an outcome of the intense competition for consumer loyalty among supermarket groups in UK and EU. It has built on public concern for the environment and food safety scares such as BSE Mad Cow Disease, Foot and Mouth Disease and the genetic engineering (GE) food debate. Consumer values and concerns for the environment and food safety are now encompassed in fresh produce quality standards, formalized in schemes such as EUREP-GAP and individual company initiatives like Tesco's Nature's Choice quality accreditation system.

The definition of apple quality now includes defined environmentally responsible practices for production requiring thorough procedures for accreditation of orchards and auditable verification of production practices. The same processes are similarly necessary for storage and packing facilities. Adoption of these new standards of quality guarantees is an essential requirement for continuing access into markets in UK and EU in the immediate future. The mega-supermarket retail chains simply require it of all suppliers.

It is a very tangible example of the pace of innovation needed by apple industries to keep abreast of market quality expectations and to remain in business. The experience in the export-dependent NZ apple industry was to actively develop and coordinate enabling technologies for full industry adoption of Integrated Fruit Production (IFP) and environmentally responsible production methods. Commencing in 1995-96 the NZ apple industry achieved 100% adoption of IFP within 5 years and IFP is now the standard production system for NZ apples.

To achieve this transformation required a large investment of industry research funding and intensive industry-wide technology transfer and coordination. IFP, as a continuous improvement system, requires ongoing technical and research investment to ensure NZ apple growers have technologies to produce apples that meet and exceed the quality and safety assurance requirements of the Northern Hemisphere

markets. IFP, more recently expanded to include organic apple production, remains a major activity for industry research funding and effort.

Product Innovation

New cultivar innovation has driven market premiums for apple producers worldwide in the past 20 years with cultivars such as Gala, Fuji, Braeburn, Jonagold and most recently Pink Lady. However the premium values for most of these new products eroded as international production expanded on the back of the high returns from early plantings. In some cases such as Fuji in the USA, the huge focus on the Taiwan market resulted in a lack of early market development for Fuji in USA which led to faltering values as volumes increased, when premiums were anticipated.

The question for the future is whether the fresh apple market can be truly segmented to give sustained premium value for innovative products and how can this be achieved. The success of the Pink Lady marketing program in the UK provides some positive indications that premium value segments can be created for differentiated products. The Pink Lady UK program has been built through an international producer consortium and Trade Marked Brand, following planned allocated supply programs through a coordinated marketing and promotion plan.

The impressive results were that Pink Lady apple in the UK market became segmented from the fresh apple category and achieved substantial price premiums in an already oversupplied apple market. However a potential danger to the ongoing success of the Pink Lady program may be the lack of control of production of the cultivar Cripps Pink, despite total control of the trade brand Pink Lady. A rapidly growing supply of fruit will enter the market as Cripps Pink, potentially undermining the Pink Lady brand premium.

The Pink Lady program in UK shows the value that can be created with brand-led fashion-setting new apple cultivar from market premiums paid by discretionary consumer responses. This builds on earlier marketing successes experienced by the New Zealand industry in launching Royal Gala and Braeburn into the world markets.

Control of new cultivars as intellectual property is enabling totally new product innovation concepts for new apple cultivars that support more sustainable market premiums and differentiation. Several essential elements necessary for premium price maintenance can be combined:

- The product: selecting exceptional new apples rated for intrinsic quality attributes and high consumer preference.
- Strong fashion-oriented branding and marketing of the new product.
- Franchised managed production to give controlled scarcity in the market.

This brand concept is being implemented in the commercialization of the new apple selection Scifresh from the HortResearch apple breeding program in New Zealand. The NZ marketer ENZA has the exclusive license for Scifresh which it has branded Jazz. Growers are licensed by ENZA for approved planted area and production, with all fruit supplied to and marketed through ENZA's marketing networks. ENZA has the initial production base in New Zealand but is implementing a 12-month global supply plan, with product development and commercial planting in France and Washington State. The concept is very dependent on combining strong skills in new product development, marketing and brand development capabilities, and strong marketing networks.

The "brand franchise" controlled produc-

Control of new cultivars as intellectual property is enabling totally new product innovation concepts for new apple cultivars that support more sustainable market premiums and differentiation.

tion concept (sometimes called the "club varieties") requires significant development investment to ensure a high likelihood of success, to offset perceptions of contractual dependence and restricted business flexibility by prospective growers. The upside is the promise of strong branded market penetration that can establish and maintain price premiums for fashionable quality differentiated apples.

Impacts on Industry Structures and Relationships

Changing marketing mechanisms and production innovation of apples seems certain to provide impetus for evolution of new grower relationships and industry organization. Most fruit industry associations are grounded in the production sector and are producer oriented, yet most change factors are market responsive.

What changes or new relationships could growers anticipate in the future?

In the large western European apple producing regions, there is the tradition of grower marketing cooperatives. The recent trend evident in Italy and Spain has been for amalgamation into fewer larger marketing cooperatives.

This ongoing evolution can be seen as a balancing response to the consolidation of procurement by the mega-supermarkets.

A second factor driving consolidation and aggregation of supply is the contraction in supply chain relationships between producer and retailer to enhance efficiency, reduce costs and improve quality and uniformity. Increasing volumes of internationally traded apples now involve only a direct relationship between the producer/packer/shipper organization in region of origin and the category manager/ receiver for the supermarket chain. Category managers and international fruit marketing groups routinely operate across regions and hemispheres. With the market and buyer consolidation internationally, there would appear to be a business imperative for apple producers to similarly aggregate their products within supply or marketing entities of appropriate scale for the changing marketing relationships.

New product innovation is possibly the business area with greatest potential to be a stimulus for new relationships, networks and marketing paradigms in the fresh apple market. It is likely that future new cultivar opportunities will not be freely accessible across whole industries. This is a fundamental change in an investment area where growers have focused future business development. Growers' uptake of new cultivar opportunities will, in future, include decisions to belong within tightly disciplined commercialization and marketing networks defined by the business entity controlling the new cultivar. Enterprising grower groups are themselves seeking out mechanisms to take the lead role in controlled commercial new variety development. All of these possibilities signal the evolution of new and different relationships that shorten and strengthen connections between producers and markets.

The "club variety" production schemes stand out as catalysts for new nontraditional relationships and networks as evidenced in Washington State and France with the ENZA Pacific Rose and Jazz franchised production programs. These new controlled modes of new product marketing may be the mechanism that achieves a durable premium apple market segment, that repositions new apple products outside the commodity food category, i.e., more choice at a higher price. These business models could provide new producer-marketer networks that may well further reshape future relationships with mega-supermarket groups.

These few examples of substantial changes in the macro-environment of the world apple industries and markets have developed over quite short time horizons within the 1990s. They show that the operating environment for fruit growers has become increasingly dynamic and subject to external changes that significantly impact the way fruit growers will operate and organize their businesses, individually and collectively, in the future