# THE U.S. FLORICULTURE INDUSTRY: STRUCTURAL CHANGES, MARKETING PRACTICES, AND ECONOMIC IMPACTS

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The environmental horticulture industry, also known as the *Green Industry*, is comprised of a variety of businesses involved in production, distribution and services associated with ornamental plants, landscape and garden supplies and equipment. Segments of the industry include wholesale nursery, greenhouse and sod growers, landscape architects, contractors and maintenance firms, retail garden centers, home centers and mass merchandisers with lawn and garden departments, and marketing intermediaries such as brokers, horticultural distribution centers, and rewholesalers.

Environmental horticulture is one of the fastest growing segments of the nation's agricultural economy, often experiencing growth and expansion even during recessionary periods. The nursery and greenhouse sector has experienced considerable growth in the last two decades, albeit slowing somewhat in recent years. The landscape design, construction, and maintenance sector has also expanded due to strong economic conditions and robust building activity. Retail sales of horticultural goods have increased for both independent and chain-store type retailers, with considerable consolidation occurring due to the increased presence of home centers and mass merchants in the lawn and garden marketplace. The outlook for the Green Industry is promising, yet there are several challenges that will increase competitive pressures.

Economic impacts for the U.S. Green Industry are estimated at \$147.8 billion (Bn) in output, 1,964,339 jobs, \$95.1 Bn in value added, \$64.3 Bn in labor income, and \$6.9 Bn in indirect business taxes, with these values expressed in 2004 dollars (Table 1). For the production and manufacturing sectors, including nurseries/greenhouses, lawn and garden equipment manufacturers, and greenhouse manufacturers, total output impacts were \$34.6 Bn, employment impacts were 300,677 jobs, and value added impacts were \$20.8 Bn. For the horticultural services sectors of landscape services and landscape

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architects, total output impacts were \$57.8 Bn, employment impacts were 753,557 jobs, and value added impacts were \$39.0 Bn. For the wholesale/retail trade sectors, total output impacts were \$55.5 Bn, employment impacts were 910,104 jobs, and value added impacts were \$35.3 Bn. The largest individual sectors in terms of employment and value added impacts were landscaping services (704,875 jobs, \$35.6 Bn), lawn and garden stores (347,916 jobs, \$14.8 Bn), nursery and greenhouses (261,408 jobs, \$18.1 Bn), florists (200,451 jobs, \$4.0 Bn), and building material supply stores (123,591 jobs, \$6.5 Bn). Other sectors with large value added impacts were general merchandise stores (\$4.0 Bn), landscape architects (\$3.5 Bn), lawn and garden equipment manufacturers (\$2.6 Bn), lawn and garden equipment wholesalers (\$2.7 Bn), wholesale flower, nursery stock and florist supplies (\$1.9 Bn), and food & beverage stores (\$1.4 Bn).

### The Nature of Floriculture Production

Participants engaged in producing Green Industry products include growers of floriculture crops, nursery crops, and turfgrass sod. *Floriculture crops* include bedding plants, potted flowering plants, foliage plants, cut cultivated greens, and cut flowers. As distinguished from nursery crops, floriculture crops are generally herbaceous. Bedding and garden plants consist of young flowering plants (annuals and perennials) and vegetable plants. They are grown in flats, trays, pots, or hanging baskets, usually inside a controlled greenhouse environment, and sold largely for gardens and landscaping.

Potted flowering plants are largely sold in pots for indoor use. The major potted flowering plants are poinsettias, orchids, florist chrysanthemums, and finished florist azaleas. Foliage plants are also sold in pots and hanging baskets for indoor and patio use, including larger specimens for office, hotel, and restaurant interiors. Cut flowers are usually sold in bunches or as bouquets with cut foliage. The most popular cut flowers are roses, carnations, gladioli, and chrysanthemums. Leatherleaf ferns are the leading cut foliage. Combining cut flowers and cut greens in bouquets or other flower arrangements is a value-added retail option.

The market outlets for floriculture crops are florists, garden centers, mass merchandisers, supermarkets, chain stores, discount stores, home improvement centers, hardware stores, landscape contractors, and rewholesalers. Other retail outlets include farmers markets, flea markets, and street vendors. Since cut flowers are perishable and live floral crops are sensitive to variations in temperature, they usually require cool transportation and storage conditions that preserve and prolong their quality before final sale. The demand for floral crops, especially cut flowers, is highly seasonal. Sales are normally highest from February through May and in the fall. Sales of cut flowers peak during holidays such as Valentine's Day and Mother's Day. Poinsettia plants are sold mostly from Thanksgiving to

Christmas. Cut flowers and foliage plants, however, are increasingly popular throughout the year as indoor home and workplace decorations.

Wholesale sales of floriculture products are usually handled by salespersons who have established relationships with large buyers. Marketing programs often include numerous trade shows, advertising in trade publications, catalogs, and direct mail. Close planning with large buyers (referred to as partnering) is required to secure long-term markets and to ensure that the right product mix is produced; however, demand for different products can still vary substantially from year to year. Sales and many variable expenses (costs-of-goods-sold) are highly seasonal, with up to 50 percent of sales in the second quarter of a typical year. Cash flow is uneven throughout the year so cash management is important. Technical knowledge of plants and pests is important for greenhouse management, although many of the everyday tasks (cultural practices) are routine and do not require highly specialized labor. However, automation has proven to be effective but expensive. Greenhouse operations can often be very sophisticated, with automatic irrigation and fertilization (sometimes referred to as fertigation), and heating/cooling air and lighting systems driven by a variety of sensors. Innovations demanded by big-box retailers (such as custom packaging and labeling, bar codes, scanners, and electronic data interchange between suppliers and buyers) are now used by many producers.

In recent years, there has been considerable consolidation among large growers, largely in response to consolidation occurring at the retail level. The rise of large, nationwide plant retailers like home centers and mass merchandisers has created a marketing opportunity for growers who can supply the volume these customers require. Some firms have "expanded" their operations through acquisitions during the past decade, mainly to service these big customers. Large growers are geared to service big customers (big-box retailers and large landscape installation/distribution companies) by handling large volumes, which has the effect of discouraging smaller-volume buyers. Independent garden centers, retail nurseries, and smaller landscape firms tend to be supplied by small-to-medium sized growers. Proximity and premium product quality are more important to these smaller-sized buyers than low price because their targeted end consumer is more interested in quality and the breadth of retail selection. Keeping plants alive and healthy is a challenge for many consumers, and smaller retail operations typically have more technically knowledgeable staff than mass retailers to assist customers with expert plant care advice.

### The Current Floriculture Situation

Despite relatively healthy growth of the U.S. economy, sales for ornamental crops in 2005 were modest. A 2-percent gain for all greenhouse and nursery receipts was evidenced following 1.3 percent growth in 2004. Sharply higher energy and gasoline prices in the last half of 2005 dampened consumer

spending on discretionary goods such as ornamental crops. Sales declines are projected for cut flowers and cut cultivated greens and no growth for indoor foliage plants. Continued strong sales for bedding and garden plants and propagative material were largely responsible for the 2.3-percent gain in floriculture crop receipts in 2005.

Although sales of greenhouse and nursery crops in 2004 were stronger for growers in the Midwest and Northeast than in the South or West—the opposite of what happened in 2003—a more even growth distribution between regions occurred in 2005 since sales in all four U.S. regions are driven largely by bedding and garden annuals and herbaceous perennials. Half of total floriculture receipts in 2005 were from bedding and garden plants compared with 44 percent in 2000. The share of these crops in total grower receipts is larger in the Midwest and Northeast than in the South and West, but the gap is narrowing.

While growers in the Western and Southern States have larger average sales, their sales per acre of total production area is smaller than for growers in the Midwest and Northeast. The difference is accounted for by more intensive propagation of bedding and garden plants in the Midwest and Northeast, as well as potted flowering plants in the Northeast, compared with other floriculture crops and relative to Western and Southern States. Operations in the colder States of the Midwest and Northeast also utilize greenhouses for crop production to a greater extent given that their greenhouse-covered area represents a larger share in total production area than in the South or West.

Floriculture sales per acre of total production area averaged nearly \$135,000 for producers in the Midwest in 2004, followed by \$112,000 in the Northeast. In the South and West, where growers utilize significantly more shade cover and open field for crop production, average sales per acre were lower at \$82,500 and \$88,500, respectively. Production costs, however, are higher in the Midwest and Northeast because of more extensive use of greenhouses for growing ornamental crops. Higher energy costs expended in heating greenhouses in the colder States in 2005 will push up their production costs and crop prices.

Average wholesale prices of domestic floriculture crops were up less than 1 percent in 2005 as cheaper imports of cut flowers and flowering plants raise their share in total supply. Indeed, import prices are anticipated to be lower than in 2004 as import volumes climb faster than import values in 2005. As a result, projected composite prices for cut flowers and flowering plants were somewhat down in 2005. Composite prices for floriculture crops were up 3.4 percent in 2004 as the dollar's lower exchange rate raised U.S. import prices. The effect of higher fuel prices in 2005 was to weaken consumer demand for domestic ornamental crops as spending is constrained by higher energy and gasoline expenses.

Prices of U.S.-grown floriculture crops in 2005 were forecast to reach 5 percent above prices in 2000, which is half the pace of import prices. Import prices of cut flowers and flowering plants in 2004 were 14 and 12 percent higher than in 2000, boosted by the weaker dollar. Prices of domestic potted flowering plants, fresh cut flowers, and especially herbaceous perennial plants are all expected to exceed 5 percent above their levels in 2000. Led by potted hardy/garden chrysanthemums, perennial bedding plant prices in 2004 were already 13 percent higher than in 2000. Only bedding and garden annual plant prices have remained flat since 1999 as production supply jumped 30 percent based on the number of containers sold through 2004.

Prices of foliage plants for indoor or patio use are likely to rise due to widespread crop damage in Florida's Miami-Dade County caused by hurricane Katrina in early September 2005. Estimated losses amount to more than \$300 million in Miami-Dade, including destroyed shade houses and possible root rot caused by flooding. Although prices of foliage plants cannot be directly determined due to the absence of quantity sold data, the effect of any net loss is to reduce total foliage plant receipts in 2005. Nevertheless, producers of potted foliage plants averaged \$424,600 in sales at wholesale in 2004, up 4 percent from 2003. The average size of their operations, which are largely located in Florida and California, more than doubled from only \$204,500 in 1993.

BEDDING AND GARDEN PLANTS – Prices of annuals among bedding and garden plants are expected to remain relatively unchanged, rising only 0.5 percent in 2005. Prices of potted annuals, projected to be about 12 percent higher in 2005 than in 2000, have climbed twice as fast as prices of flats or hanging baskets since 2000. Nevertheless, average prices of herbaceous perennials lead all bedding and garden plants with 15 percent anticipated growth since 2000, largely due to higher prices for potted hardy/garden chrysanthemums.

Grower sales of herbaceous perennials were expected to be up by 4.5 percent in 2005, following 8 percent growth in 2004. Since 2000, perennials' sales will be up 65 percent in 2005, not unlike sales of all propagative materials. Sales of perennials by growers in Western States, particularly California, have shot up by 121 percent since 2000, about double the sales growth in the South and Midwest, and 3.5 times that in the Northeast. Sales of annuals, on the other hand, will experience only 15 percent expansion since 2000.

Total grower sales of bedding and garden plants have almost doubled in the past decade, the fastest among the floriculture crop groups. While herbaceous perennials account for a large part of this growth (partly due to more plant varieties surveyed by NASS in 2000), sales of potted annuals and hanging baskets have significantly increased over the past decade, eclipsing annuals in flats. In fact, the number of annuals in flats sold in 2004 was back down to its level in 1995. These trends coincide roughly with average sales per US

household in which purchases of annuals in pots and hanging baskets have grown sharply in contrast to lower spending for annuals in flats in recent years.

POTTED FLOWERING PLANTS – Sales of potted flowering plants are projected at \$831.4 million in 2005, up 2 percent from 2004. These sales are driven by orchids, poinsettias, florist chrysanthemums, and spring flowering bulbs. These plants also lead in the number of pots sold. In average price per pot sold, the plants that exceed \$4 are florist azaleas, Easter lilies, and poinsettias. Orchids averaged \$7.70 per pot sold at wholesale in 2004, the highest among all major flowering plants. Average prices for all major plants in 2004 were highest in the Midwest at \$4.25 per pot. Producers in the West and South received \$4.07 per pot on average in 2004, and \$3.48 in the Northeast. Price inflation per pot was most favorable to growers in the Northeast and Midwest—advancing by 17 and 15 percent respectively, from 2000 to 2004. For growers in the South and West, prices received per pot in 2004 were 4 percent lower than in 2000.

Prices of potted flowering plants have been relatively flat since 2001 as the number of pots sold annually has remained around 238 million on average from 1992 to 2005, within a narrow range of plus or minus 4 million pots. The stagnant demand for these plants is in part due to competition from less expensive bedding and garden annuals as well as perennials, and in part due to increasing imports. Imported orchid plants are rising rapidly in value and volume in 2005 despite a decline in 2004, an indicator of strong consumer demand. However, import prices are down sharply as cheaper plants from Thailand, South Korea, and Canada are penetrating the expanding U.S. market.

Growers of potted flowering plants averaged \$374,300 sales at wholesale in 2004, up 6 percent from 2003. The average size of their operation has expanded by nearly 50 percent from \$252,500 in 1996. However, for producers of orchids, average sales were \$564,600 in 2004, up 19 percent from 2003. This value is almost twice as much as in 1996 when orchids were first surveyed by NASS. In contrast, growers of Easter lilies averaged only \$63,100 in sales in 2004, the lowest among major potted flowering plants. Thus, as would be expected, the number of growers producing Easter lilies have fallen by a third since 1996 while those growing orchids have increased 29 percent.

CUT FLOWERS -- Growers of fresh cut flowers sold 784 million stems, bunches, and blooms worth \$422 million in 2004. Both value and quantity sold were down from 2003 as growers continue to reduce production volume of roses, carnations, gladioli, and snapdragons despite higher or unchanged unit value prices. Although the average U.S. household spent \$10 on cut flowers in 2004, up from \$9.18 in 2003, about 62 cents out of each dollar spent were paid to importers and foreign growers. Imported cut flowers

reached \$700 million in 2004, up more than 16 percent but import value is expected to remain unchanged in 2005 despite a projected 3 percent gain in import quantity. Import prices are projected down as import quantity has grown faster than corresponding import value in January-June 2005.

The import share in total supply of cut flowers based on sales value was 62 percent on average in 2004, up from 59 percent in 2003. The import share for roses was 85 percent; pompon chrysanthemums was 75 percent; standard carnations 95 percent; and orchids 42 percent. Based on quantity sold, the import share in the supply of major cut flowers was 78 percent in 2004, which is much higher than the 62 percent based on value because U.S. growers are producing more higher-value cut flowers that face less competition from imports.

The number of fresh cut flower growers in the United States has dwindled to 536 in 2004 from 829 in 1997 and 667 in 2000. While growers' total sales receipts and quantity sold continue to decline, average sales per grower is still growing—\$786,600 in 2004, indicating that growers have larger operations on average. Most of these large growers are located in California, whose cut flower sales in 2004 were \$303.6 million. Growers in other States sold \$118 million worth of cut flowers in 2004, less than half of California's sales receipts. Average cut flower sales per grower are highest for roses, lilies, gerbera daisies, gladioli, and tulips—all above or close to \$400,000 in 2004. Except for roses and gladioli, total grower sales and quantity sold of these cut flowers have also grown since 2000.

### Floriculture Industry Outlook

Competitive rivalry in the floriculture industry is intensifying, especially at the retail level. Lowe's, Home Depot, Wal-Mart and Kmart, the mass merchandising stores [often referred to as box store or chain stores] that sell truckloads of plants at "every-day-low-prices," are continuing to ramp up their presence in the lawn and gardening industry. Their largest competitors include thousands of independent garden centers across the nation that charge higher prices but typically provide far more service and variety.

Box stores recognize that knowledge and service are key success factors and are attempting to reconcile deficiencies in that arena. For example, Home Depot Inc., North America's largest seller of lawn and garden products, has embraced a computerized gardening and landscaping training course organized by the University of Georgia's horticulture department to help increase the level of horticultural acumen their employees can provide to customers. These trained salespeople, in turn, offer workshops on such topics as weed control and garden planting much like the chain offers clinics on laying tile or hanging wall paper. Home Depot is also installing larger garden center formats in new stores and expanding centers at some of their older, established stores. And in a move to help it overcome its traditionally poor

care of its plants, Home Depot is changing its relationship with its plant vendors though "pay-by-scan" compensation systems where vendors now will get paid only for plants that actually sell (much like a consignment system), putting the onus on them to make sure the flowers and shrubs sitting on the chain's shelves are attractive and in good shape. They will be expected to visit its 2,000+ stores daily with fresh deliveries if need be.

The other titan in garden goods, Lowe's Companies, Inc., also has developed aggressive strategies for capturing for market share. Lowe's is working with selected breeders to devise exclusive plant varieties for its own premium plant brand, Garden Club Select. It also has joined with rose-industry pioneer Jackson & Perkins to sell J&P-branded roses, a relationship it hopes to broaden by obtaining rights to "cause" roses, such as the Lady Diana rose, that would be unique to the 1,225-store chain.

While big box stores and mass merchants have captured over half of the amount Americans spend a year on lawn and garden plants, the independent garden centers aren't surrendering. They do not have the volume to compete effectively on price, so they attempt to compete with better selection and more value-added services, which are especially attractive to new gardeners. They are introducing their own branded plants sold under house names or nationally available labels such as Proven Winners, Simply Beautiful, Flower Fields, Miracle Grow, and Plants that Work. Specific products have also reached national brand status like the Wave Rave petunia campaign by Pan American Seed. Notable gardening personalities such as Martha Stewart and P.Allen Smith are marketing their own collection of gardening products and plants. Some garden centers are going further, adding cafes, coffee bars, meeting spaces, or other amenities. Others offer extensive how-to workshops or provide free landscaping advice and/or designs or plant shrubs for customers (though usually at an extra charge) and should a plant have problems, in-house "experts" will assist in diagnosing what went wrong.

STRUCTURAL CHANGES IN THE INDUSTRY — There is little doubt that the impacts of mass marketers on the nursery and floricultural industry are farreaching. To their credit, many would argue that the box store chains have exposed many more consumers to nursery and floral products, thereby increasing the "size of the pie". Undoubtedly this is true, as the presence of mass marketers has opened not only the consumers' eyes to the industry's products but provided additional marketing opportunities for growers as well.

Obviously, earlier discussion leads to conclusion that one of the impacts of the mass marketing of floricultural crops has been to promulgate an increase in overall size of growing operations. The capital requirements needed to afford the greenhouse infrastructures required to produce mass quantities of product in a confined marketing window exceed those that this industry has historically managed. Most firms have been able to generate the capital on their own, but the industry also has seen examples of investment brokers

entering the industry to help finance some of these production operations. The financial returns of many of these venture capital acquisitions have seldom met Wall Street expectations however.

In some instances, chain store buyers have limited the number of approved vendors with whom they deal in any market area, as chains have come to realize certain procurement and merchandising efficiencies if fewer vendors are utilized. Chains have begun asking vendors to provide plant care for instore displays, especially during the peak of the bedding/garden plant season, something that is easier to request if there are only a few firms handling most of the merchandise. Whether or not producers are adequately rewarded for the additional expense of providing fully managed retail displays is debatable, but some growers report that the improved product care leads to additional product turns, which in turn provide the needed financial (gross margin) results.

There are also several instances of large producers partnering (usually on a contract basis) with several smaller firms in order to handle the volumes required to supply large retail chains. In some instances, there may be several dozen growers involved in cross-docking activities to satisfy one chain's product supply needs in one market area. Depending upon the arrangements, this helps to spread the risk among several producers. Still, there are numerous examples of producers who supply 50 to 75 percent of their output to one chain. When asked about the market risk, these growers often respond with discussions about production efficiencies, economies of scale, and questions about what they could do even if they wanted to change, noting that their competitors would be more than happy to take over the account.

In contrast, the focus on mass marketers by large growers has created opportunities for smaller growers to develop niches serving independent retailers/landscapers or to go into retailing themselves, selling directly to the consumer. In a recent national survey of growers, it was found that 59 percent of several thousand producers surveyed did retail some portion of their product mix on their own, ranging from 1 to 80 percent of their production. Smaller growers appeared to sell higher percentages, on average, of their production on a retail basis either from drive-in customer traffic at the nursery/greenhouse or at wholly-owned retail sales yards. Yet, some larger producers have also used their own retail outlets as a tactic for risk diversification.

The other impact of mass marketers has been consolidation within the production sector. In recent years, grower numbers have appeared to decline from year to year, or at best, remain stable. One could debate as to the reasons producer numbers are diminishing, but many would argue that the stresses of either supplying mass marketers or competing with them as an independent grower-retailer are taking their toll. The capitalization

requirements, increased input costs (e.g. fuel), reduced margins, increased demands from buyers, and the market power associated with fewer numbers of buyers have all created intense market pressures and heightened competitive rivalry among larger producers. The struggle to remain competitive in a viable niche for smaller producers can be equally trying in markets being inundated by competing chains.

The long-term consequences are uncertain, but the need to recognize and closely monitor consumer expectations, tastes, and preferences is imperative. If consumers were, for some reason, to develop a negative impression of the industry's products or for how those products are presented by a particular retail giant, this could have dire consequences for future growth in the entire industry. Keeping the consumer intrigued and sufficiently motivated is important, and will likely require collaborative efforts among participants in each sector of the industry-wide value chain.

# Is the Industry Showing Signs of Maturing?

A maturing industry is one that is moving from rapid growth to significantly slower growth. An industry is said to be mature when nearly all potential buyers are already users of the industry's products. Market demand consists mainly of replacement sales to existing users, with growth hinging on the industry's ability to attract new buyers and convince existing buyers to increase their usage. In the case of consumer goods industries, maturity means that they typically have a growth rate under 5 percent – roughly equal to the growth of the customer base or economy as a whole.

An industry's transition to maturity does not begin on an easily predicted schedule. Industry maturity can be forestalled by the emergence of new technological advances, frequent product innovations, or other driving forces that keep rejuvenating market demand. Nonetheless, when growth rates do slacken, the onset of market maturity usually produces fundamental changes in the industry's competitive environment including some of which we are seeing in the floriculture industry:

- Slowing growth in demand is generating more head-to-head competition for market share. Firms that want to continue on a rapid-growth track are starting to look for ways to entice customers away from competitors. In such situations, price cutting, increased advertising, and other aggressive tactics to gain market share are common.
- Buyers are becoming more sophisticated, often driving a harder bargain or requiring additional services in order to repeat purchases. Since buyers have experience with the product and are familiar with competing brands, they are better able to evaluate different brands and can use their market power (knowledge) to negotiate a better deal with vendors.

- Competition is producing a greater emphasis and cost and service. As growers all begin to offer the product attributes buyers prefer, buyer choices increasingly depend on which grower offers the best combination of price and service.
- Growers are experiencing a topping-out problem in adding new facilities. Reduced rates on industry growth mean slowdowns in capacity expansion for input manufacturers and slowdowns in new store growth for retails chains. With slower industry growth, adding too much capacity too soon can create oversupply conditions that adversely affect company profits well into the future.
- Product innovation and new end-user applications are becoming harder to come by. Breeders/growers find it increasingly difficult to create new product features and sustain buyer excitement.
- International competition continues to increase. Growth-minded domestic
  firms are starting to seek out sales opportunities in foreign markets. Some
  companies, looking for ways to cut costs, relocate growing operations to
  countries with lower wage rates. Industry leadership passes to companies
  that succeed in building strong competitive positions in most of the world's
  major geographic markets and in winning the biggest global market
  shares.
- Industry profitability is being influenced by tighter margins. Slower growth, increased competition, more sophisticated [and maybe fewer] buyers that place greater demands on their vendors, stagnant price levels, and occasional periods of overcapacity have put pressure on industry profit margins. Weaker, less-efficient firms are usually the hardest hit.
- Stiffening competition has induced a number of mergers and acquisitions among former competitors, driving the weakest firms out of the industry, and producing industry consolidation in general. Inefficient firms and firms with weak competitive strategies can achieve respectable results in a fast-growing industry with booming sales. But the intensifying competition of a maturing market throws second-and-third-tier competitors into a survival-of-the-fittest contest.

# Strategic Moves in a Maturing Industry

As the new competitive character of floriculture industry maturity begins to hit full force, any of several strategic moves can strengthen a growers' competitive position including pruning the product line, improving value chain efficiency, trimming costs, accelerating marketing and sales promotion efforts, and acquiring struggling competitors.

PRUNING MARGINAL PRODUCTS AND SIZES – A wide selection of plant materials and sizes sometimes has competitive value during the growth stage, when buyers needs are still evolving. But such variety can become too costly as price competition stiffens and profit margins are squeezed. Maintaining many product "versions" works against achieving production economies at the growing level and can increase inventory stocking costs for re-wholesale distributors and retailers. In addition, the prices of slow-selling plants may not cover their true costs. Pruning marginal products from the product mix opens the door for cost savings and permits more concentration on items whose margins are highest and/or where the firm has a competitive advantage.

More Emphasis on Value Chain Innovation — Efforts to reinvent the industry value chain can have a fourfold payoff: Lower costs, better product or service quality, greater capability to turn out multiple or customized product variations (upgrades), and shorter design-to-market cycles. Growers can mechanize high-cost activities, re-design production practices to improve labor efficiency, build flexibility into the "assembly" process so that customized product versions can be easily produced, and increase use of advanced technology (robotics, computerized controls, and automated/guided vehicles.) Suppliers of parts and components, input manufacturers, distributors, and buyers can collaborate on the use of internet technology and e-commerce techniques to streamline various value chain activities and implement cost-saving innovations.

A STRONGER FOCUS ON COST REDUCTION — Stiffening price competition gives growers extra incentive to drive down unit costs. Company cost-reduction initiatives can cover a broad front. Some of the most frequently pursued options are pushing suppliers for better prices, implementing tighter supply chain management practices, cutting low-value activities out of the value chain, developing more economical product designs, streamline order processing and pulling, reengineering internal processes using e-commerce technology, and shifting to more economical distribution arrangements and systems (e.g. racking systems).

INCREASING SALES TO PRESENT CUSTOMERS – In a mature market, growing by taking customers away from rivals may not be as appealing as expanding sales to existing customers. Strategies to increase purchases by existing customers can involve providing complementary items and ancillary services, and finding more ways for customers to use the product. Developing deeper relationships with key buyers (through personal visits, customized mailings, etc.) will more often than not pay big dividends.

**PURCHASING RIVAL FIRMS AT BARGAIN PRICES** – In a maturing market, sometimes a firm can acquire the facilities and assets of struggling rivals quite cheaply. Bargain-priced acquisitions can help create a low-cost position if they also present opportunities for greater operating efficiency. In addition,

an acquired firm's customer base can provide expanded market coverage and opportunities for greater scale economies. The most desirable acquisitions are those that will significantly enhance the acquiring firm's competitive strength.

BUILDING NEW OR MORE FLEXIBLE CAPABILITIES — The stiffening pressures of competition in a maturing or already mature market can often be combated by strengthening the company's resource base and competitive capabilities. This can mean adding new competencies or capabilities (by either making or buying them), deepening existing competencies to make them harder to imitate, or striving to make core competencies more adaptable to changing customer requirements and expectations.

# Strategic Pitfalls in Maturing Industries

Perhaps the biggest strategic mistake a company can make as the floricultural industry matures is steering a middle course between low cost, differentiation, and focusing; blending efforts to achieve low cost with efforts to incorporate differentiating features and efforts to focus on a limited (niche or cache) target market. Such strategic compromises typically result in a firm ending up stuck in the middle, with a fuzzy strategy, too little commitment to winning a competitive advantage, an average image with buyers, and little chance of springing into the leading ranks of the industry.

Other strategic pitfalls include being slow to adapt existing competencies and capabilities to defend against stiffening competitive pressures, concentrating more on protecting short-term profitability than on building or maintaining long-term competitive position, waiting too long to respond to price cutting by rivals, over-expanding in the face of slowing growth, overspending on advertising and sales promotion efforts in a losing effort to combat the growth slowdown, and failing to pursue cost reductions and/or production efficiencies soon enough or aggressively enough.

## Summary

There is little doubt that the floricultural industry has been characterized with unprecedented growth, innovation, and change over the last couple of decades. Yes, the fact that the green industry in the United States represents \$148 billion in economic impacts and almost 2 million jobs nationally is impressive. The fact that nursery and floral production still represents one of the fast growing sectors in agriculture means profitability in the industry has been evidenced otherwise such growth would not have occurred. However, slowing growth in demand tighter margins (along with other aforementioned factors) point to a maturing market. Survival in the next decade will require a progressive mindset and perhaps a willingness to strengthen existing or develop new core competencies (which may incur greater risk). While the crystal ball may be somewhat fuzzy in terms of the growth and nature of

consumer demand, there is little doubt that innovativeness will continue to be a requisite skill in ensuring the survivability and profitability of floricultural firms in the future.

### References

Brumfield, Robin, Economic and Marketing Issues from a Grower's Perspective, Agricultural Outlook Forum 2003, presented Friday, February 21, 2003.

Green Industry Research Consortium (S-290 Multi-State Research Committee) Fourth National Nursery Industry Survey, www.s290.org.

Hall, Charles, Alan Hodges, and John Haydu. *Economic Impacts of the Green Industry in the United States*. Final report to the USDA-Forest Service, National Urban and Community Forestry Advisory Committee, June 2005, [www.utextension.utk.edu/hbin/greenimpact.html].

Jerardo, Alberto, Floriculture and Nursery Crops Situation and Outlook Yearbook, USDA-ERS FLO2005, June 2005, [www.ers.usda.gov/Briefing/floriculture].

Jerardo, Alberto, Floriculture and Nursery Crops Outlook, USDA-ERS FLO-04, September 2005, [www.ers.usda.gov/Briefing/floriculture].

Miller, Marvin, Opportunities and Challenges for Floricultural Producers Selling to a Changing Marketplace, Agricultural Outlook Forum 2003, presented Friday, February 21, 2003.

USDA-NASS, Floriculture Crops 2004 Summary, April 2005, [www.nass.usda.gov].

USDA-NASS, Nursery Crops 2004 Summary, July 2005, [www.nass.usda.gov].