



# FACT SHEET

## An Overview of Successful Produce Wholesaling Opportunities for Local Farmers in the Baltimore-Washington Region

Fact Sheet 646

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### Introduction

The Mid-Atlantic region of Maryland, Pennsylvania, Virginia, and West Virginia encompasses one of the largest population centers in the country. Baltimore, Philadelphia, Norfolk, Richmond, and Washington, DC, are all large cities located in this region. In addition, “edge cities,” such as Tysons Corner and Reston, Virginia, and Columbia, Maryland, have grown rapidly, reflecting the suburban expansion. This population creates a tremendous market for fresh produce, such as vegetables, fruits, and floral products. Produce sales at food stores generally represent 8.5 percent of total food sales; 1.33 billion dollars of produce were sold in the Mid-Atlantic region during 1991 (Food World). Within this region, 282 million dollars and 442 million dollars of produce were sold in the Greater Baltimore and Greater Washington markets, respectively.

Other factors being equal, consumers show a strong preference for local produce in season. Local farmers have had considerable success in providing produce to consumers in the Mid-Atlantic region through direct marketing ef-

forts. Farmers’ markets and onfarm retail stands have expanded rapidly in recent years. Pick-your-own operations are still popular, but they may have reached their maturity because many households have two income earners and lack free time. Even with these successes, however, local farmers’ market share of the Mid-Atlantic produce market is minimal.

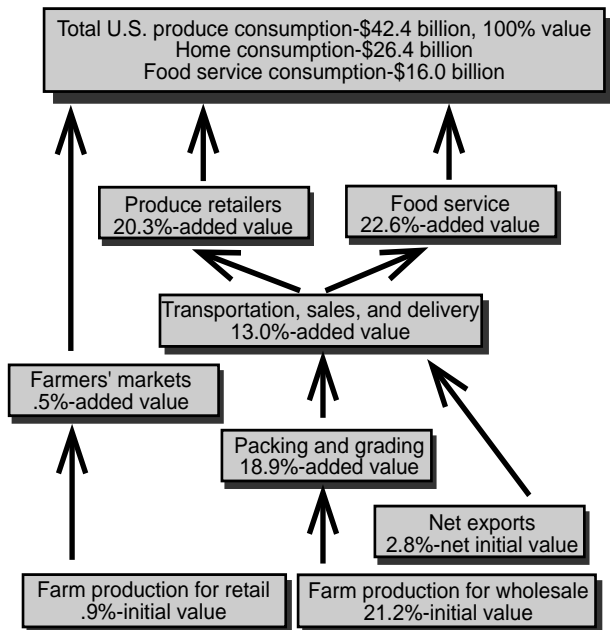
Many produce farmers want to increase their level of wholesaling activity. For some, it is a means of diversifying their marketing efforts so that they are not solely reliant on direct marketing. For others, wholesaling represents the best method of merchandising their produce. Also, a strong fruit, vegetable, and floral wholesale industry offers greater potential for long-term growth (Brooker). In any case, the questions from local farmers are the same: Why has wholesaling been so limited? Who are the buyers? What do the buyers want? How should they be contacted? What are the rules of the game for successful produce wholesaling, and how can an individual farmer more successfully and efficiently navigate the wholesaling route from his or her farm gate to the family table?

This fact sheet and the two accompanying fact sheets are directed toward more profitable participation by local farmers in the wholesale marketing channel. Emphasis is placed on identifying and developing skills necessary for effective wholesaling. In addition, the concept of pricing windows is reviewed to encourage farmers to choose planting dates to capture the highest prices possible.

# Produce Marketing Channels in the United States

Figure 1 shows the U.S. marketing system for fresh produce in the late 1980's (How, page 78). Initial value and added value are expressed as a percentage of total produce consumption (estimated to be \$42.4 billion annually). Initial value refers to the value of production; added value shows the contribution of each stage in the product's route to the consumer. The initial value of growing produce by American farmers is 22.1 percent. Of this total, the vast majority is produced for wholesale markets (21.2 percent) and the remainder for retailing through farmers' markets (0.9 percent). Net exports are defined to equal exports of American produce less imports of foreign produce. Since imports exceed exports, the net initial value of the contribution by foreigners is 2.8 percent.

Figure 1 illustrates several points regarding the potential importance of produce wholesaling by local farmers. First, on a national level,



Note: Initial or added value is expressed as a percentage of total U.S. produce consumption (\$42.4 billion)

Source: Adapted from How 1991

**Figure 1.** U.S. marketing system for fresh produce in the late 1980's.

direct marketing is insignificant compared to distribution through wholesale channels. Farmers add approximately 0.5 percent of value by their operation of retail stands to their initial production value of 0.9 percent, for a total contribution of 1.4 percent. While the use of local farmers' markets by consumers in the Baltimore-Washington area is higher than the national average, it too is probably not significant if measured as a percentage of that area's produce consumption. Figure 1 does not imply that direct marketing by farmers is not profitable. However, it does imply that if local produce acreage is to expand significantly, the vast majority of this increased production will probably be distributed through wholesale channels.

In terms of wholesaling, the three greatest components of value are contributed by the farmers who grow the produce (21.2 percent); the food service industry, such as restaurants (22.6 percent); and produce retailers, such as grocery stores (20.3 percent). Farmers can increase the value of their contribution to 53.1 percent from 21.2 percent by properly packing and grading the produce, transporting, selling, and delivering it to clients (produce retailers or food service establishments). The added value of grading and packing (18.9 percent) is almost equal to the initial value of production by farmers (21.2 percent).

Transportation, sales, and delivery add a value of 13 percent. At the national level, this category can be split between transportation to a terminal market (8 percent)—where wholesalers and brokers sell—and delivery to produce clients (5 percent). These two categories were combined in Figure 1 since many local farmers are located near the Baltimore-Washington area and can transport and deliver produce directly to their own retail or food service clients.

Figure 1 shows the dollar value of produce moving from farms to consumers; it does not show the profitability of each stage and does not indicate specific prices at each stage. Relative profitability and prices are determined by the skill and performance of participants at each stage. For example, some farmers are more efficient producers and as a result have lower costs of production per unit of

output. There are other growers who consistently outsell (price and quantity) their neighbors at farmers' markets as a result of a combination of produce quality and variety, produce presentation, stand location, and an outgoing personality.

Figure 2 identifies the skills necessary to participate in the produce marketing system for the Mid-Atlantic region. The dark arrows indicate established channels. Growers and shippers of produce from such regions as California, Florida, and Mexico have dominated the wholesale channels. They either pack, grade, and transport to brokers and wholesalers or, with their own sales agents, deliver to major produce retailers in the Mid-Atlantic region. Local growers have used farmers' markets with success to sell directly to consumers.

The white arrows indicate the two wholesaling marketing options that are the subject of this and the accompanying two fact sheets. One option for a farmer is to pack, grade, and transport produce to local wholesalers or brokers. Wholesalers either buy the produce or act as commission merchants for local farmers. If they buy the produce, they take possession and title to the produce, locating their own clients and delivering the produce. If the wholesalers act as commission merchants, they take possession but not title. In this case, they locate buyers for the farmers, deliver the produce, and receive a commission for their

efforts. Brokers are agents who represent farmers for a commission and take neither possession nor title to the produce. Brokers locate clients for the farmer and then the farmer delivers the produce.

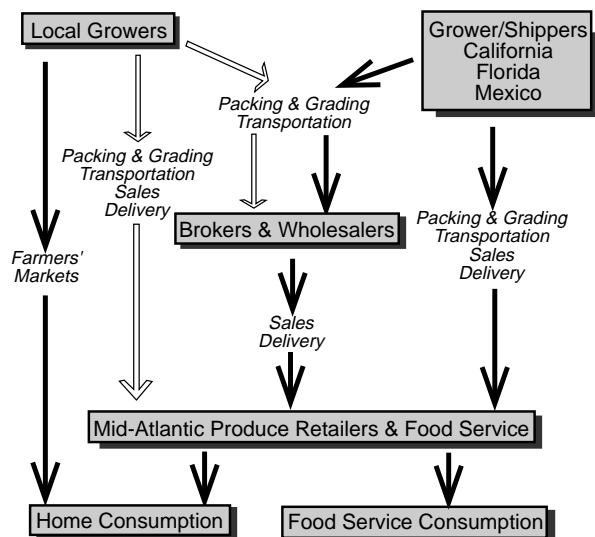
Another option is for farmers to wholesale directly to produce retailers or food service providers. Some growers who have small farms cannot justify the expense of employing brokers or commission merchants. Others believe that they can fulfill the role of these sales representatives. To be successful, these farmers must perform the functions of packing and grading, transporting, selling, and delivering produce more efficiently than professionals in the wholesaling channel. If they are successful, however, they can more than double the initial value of their production at the farm level (Figure 1).

The spread between the prices of produce at the retail and farm levels has continued to increase in recent years (Sulecki). Farmers can reduce this spread in prices by retailing directly to consumers in farmers' markets or by performing several of the functions in the wholesale channel. Whether farmers retail or wholesale their produce depends on personal choice and skills. Farmers should choose the marketing strategy that they enjoy and with which they can make the highest profit.

For farmers who choose the wholesaling channel, proper packing and grading is not an option. However, these farmers can choose between using existing wholesalers and brokers or acting as their own sales representatives and locating clients. Growers must carefully evaluate their skills; participation in one or more stages of wholesaling, while increasing produce value, does not necessarily guarantee increased profits.

## Attitudes of Local Produce Buyers

In 1991, a survey was conducted of 182 local produce buyers in the Baltimore-Washington region (Hanson and Rada). The underlying assumption of the questionnaire was that "the customer is always right." For farmers considering wholesaling, their customers



**Figure 2.** Functions in the Mid-Atlantic produce marketing system.

are produce buyers. This does not mean that because the buyer is right, the farmer is wrong. It does mean, however, that unless a farmer has a monopoly on the product he or she sells, the buyer sets the rules of the game. This is true for most business transactions in a free market economy and is particularly true for the local produce business. Unless farmers adapt their marketing procedures to standards accepted by wholesalers and other buyers, buyers will continue to purchase the vast majority of their produce from sources outside the region. It is important to note that a large number of buyers were contacted, but there are many more buyers in the Baltimore-Washington region that were not surveyed. Consequently, these results are presented as opinions of a significant minority. A particular buyer or farmer may have had a different experience than those stated here.

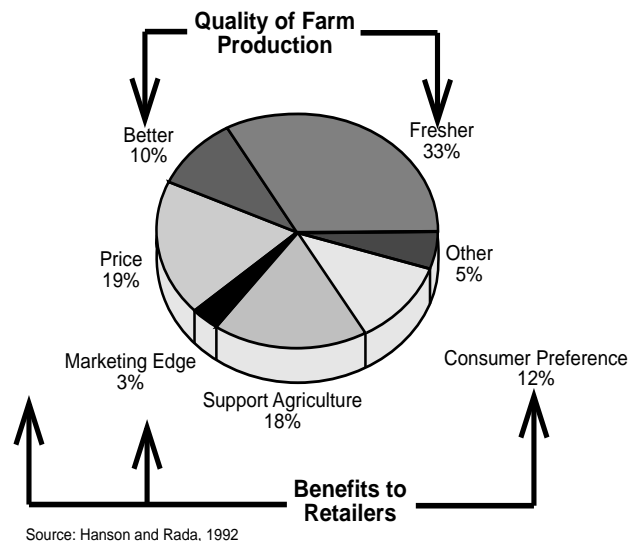
Seven different wholesale buyer segments were identified and surveyed. They were wholesale distributors, independent food chains (fewer than 10 locations), chain food stores (more than 10 locations), specialty retailers, restaurants, institutional food providers, and florist shops. Brokers and commission merchants were not interviewed. In terms of Figure 2, wholesale distributors are the intermediate wholesale link between farmers and produce retailers and food service providers. Farmers pack, grade, and transport the produce while wholesale distributors add value in the sales and delivery category. The other buyer segments represent examples of direct wholesaling by farmers to produce retailers and food service providers. Independent food chains, chain food stores, specialty retailers, and florist shops are examples of produce retailers. Restaurants and institutional food providers are examples of the food service providers. In this case, farmers pack, grade, transport, sell, and deliver their produce directly to these buyers.

Only 36 percent of all buyers interviewed in the Baltimore-Washington region currently purchase local produce. Active buyers of local produce purchase from, on average, four farmers. However, there is large, untapped potential for local produce that meets industry standards. Seventy-nine percent of all buyers

interviewed would be interested in purchasing or expanding their purchases of local produce.

Buyers were asked why they purchase or want to purchase produce locally as opposed to from other sources. They were given the option of providing several answers. Percentages shown in Figure 3 indicate the number of times a particular response was given as a percent of all responses. The higher quality of locally grown produce is the main reason buyers purchase this produce (fresher—33 percent, better—10 percent). Buyers also purchase local produce because of retail benefits: customers prefer and ask for local produce (12 percent), supporting local farmers is good for a store's relationship with its community (18 percent), and advertising the availability of local produce provides a marketing edge with competitors (3 percent). Lower prices (19 percent) were also a factor in buying local produce. In summary, 76 percent of all answers provided indicate that buyers want local produce for positive reasons, such as farm gate quality (better and fresher) and retail benefits (support for local agriculture, marketing edge, and consumer preference) rather than the negative reason, at least from the farmers' point of view, of lower price.

Buyers also were asked what were the most serious avoidable problems they have with local farmers; in other words, why they do not



**Figure 3.** Reasons why local produce is purchased.

purchase more local produce. Again buyers were given the option of providing several answers. Figure 4 shows that the major complaint was that buyers were not satisfied with the condition of the produce that was delivered (59 percent). Within this category, 26 percent said it was improperly graded or packed, and 33 percent noted that the quality within and among loads was inconsistent. Inconsistent quality also is concerned with produce that was picked too ripe or with too much field heat (short shelf life). Buyers state that inconsistent quality is found often enough that they must spend time and money to avoid it.

In addition, buyers (28 percent) were concerned with the level of service provided by farmers. Frequent comments within this category included delivery problems and business practices. Besides unreliable deliveries, buyers do not like being the “dumping ground” for one-time sales. Buyers emphasize that the produce business is more accurately a “people business” in which success stems from long-term relationships. Unprofessional business practices included poor communication skills and inadequate invoicing procedures. Only 10 percent of the buyers said that inadequate quantities of produce at delivery were a problem.

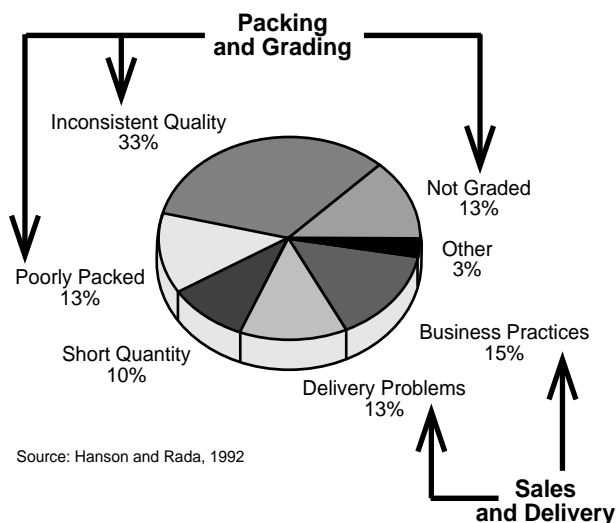
These concerns are echoed in a survey of buyers in southern Virginia (Runyan et al.). In that study, buyers noted the following prob-

lems with local produce: (a) lack of consistent quality, (b) uneven sizing and grading, (c) produce is too mature when harvested, (d) lack of advance notice of product availability, (e) produce contains too much field heat, (f) lack of trading relationships between buyers and growers, and (g) lack of grower cooperative organizations.

In terms of Figure 2, the strengths of local produce can be seen at the top and bottom of the diagram. Produce raised by local farmers is perceived to be fresher and of higher quality than produce provided by growers and shippers from out of the region. Also, produce identified as local benefits the Mid-Atlantic produce retailers and food service segments in their business activities with consumers. The problems of wholesaling local produce are found in the middle of the diagram. Whether wholesalers or produce retailers and food service providers, these buyers are dissatisfied with the packing and grading, sales, and delivery practices of local farmers. Successful wholesaling by local farmers will require emphasizing the positive to buyers (quality of farm produce and benefits to retailers) and eliminating the perceived negatives (packing and grading, service, and delivery).

The financial rewards of successful wholesaling of local produce can be substantial. With funding from the State legislature and the farm community, New Jersey has marketed its produce to the public through the Jersey Fresh label since 1983. Farmers who participate under this label must follow quality standards for packing and grading. One result of this combined effort has been an increase in New Jersey’s share of the shelf space in that state’s supermarkets from 7 percent to 35 percent (Garreau); another is an increase in the prices New Jersey farmers receive for their produce.

Table 1 shows the relative price indices of several produce items for the last 3 years for New Jersey compared with other Mid-Atlantic states over the fresh market season, compiled by the Federal/State Market News Service, located at the terminal market in Jessup, Maryland. Prices published by the Market News Service reflect prices quoted at Jessup and by major buyers in the Baltimore region. The



**Figure 4.** Reasons why local produce is not purchased.

**Table 1. Price indices (percentages) of selected produce commodities during the fresh market season received by New Jersey growers compared with prices received by growers in other Mid-Atlantic states in the Baltimore region, 1989–91**

Green beans 1 bushel	Cabbage (green) 50-pound carton	Cucumbers 1 <sup>1</sup> / <sub>9</sub> bushel	Eggplant 1 or 1 <sup>1</sup> / <sub>9</sub> bushel	Bell peppers 1 <sup>1</sup> / <sub>9</sub> bushel	Spinach 1 bushel, loose	Zucchini 1/2 or 5/9 bushel
1989: 149	133	87	133	152	148	122
1990: 143	108	117	156	93	146	140
1991: 109	122	124	162	119	162	123

Sources: "The Baltimore Fresh Fruit and Vegetable Wholesale Market Prices (1989, 1990, 1991), Federal/State Market News Service.

Market News Service typically quotes price ranges; the price indices in Table 1 were computed from the averages of these ranges. The Market News Service publishes prices for major markets in 40 states, of which the Jessup terminal is one. It has been estimated that these prices represent 90 percent of all produce arrivals in an individual market (How, page 124).

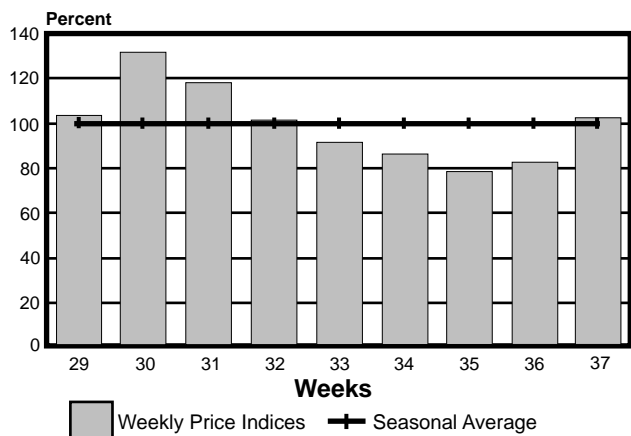
New Jersey's prices are expressed as a percentage of the other Mid-Atlantic States. For example, New Jersey's 149 percent index for green beans in 1989 is interpreted as follows: If the average price for green beans for the other Mid-Atlantic states was \$10 per bushel carton, New Jersey's price was \$14.90 per bushel carton. Except for cucumbers in 1989 and green peppers in 1990, New Jersey had a higher average price for the commodities shown than the average of prices in the other Mid-Atlantic states.

Two points should be made. First, it is not clear whether New Jersey's higher prices are the result of the State's advertising the Jersey Fresh label or of farmers under that label properly packing and grading, and following good wholesaling techniques, or both. Whatever the cause, informal interviews with buyers at the Jessup terminal market indicate that they can sell all the Jersey Fresh produce they can acquire. Second, there are many farmers outside of New Jersey in the Mid-Atlantic region who are effective wholesalers and who capture similar prices for their products. These considerations notwithstanding, average price differentials between New Jersey and the other states are significant, indicating substantial rewards to a successful wholesaling program.

## Marketing Windows

The preceding discussion has focused on proper wholesaling techniques so that in direct competition with other farmers, the individual grower will receive a premium price for his or her produce. Marketing windows are defined as periods of time during the growing season when farmers can expect to sell produce for a higher price (Hinson and Lanclos). In this case, the grower seeks to avoid direct competition with other farmers, selling produce when the relative supply is low and consequently receiving a higher price. Recognizing that the local growing season is finite in the number of growing days, dramatic shifts, such as harvesting cantaloupes in February, are not possible. However, shifting planting dates by several weeks in either direction can make a considerable difference in the prices a farmer receives.

Figure 5 shows weekly prices compared with seasonal prices (expressed as percentages) for bell peppers grown in Maryland and sold in the Baltimore markets during the period 1989 through 1991 (Federal State Market News). The percentages are interpreted as follows: In week 29 the price index was 104 percent. During the years 1989 through 1991, the prices recorded in week 29 were, on average, 104 percent of their respective seasonal prices. If farmers could select planting dates so as to have harvested bell peppers to sell before the second week in August (week 33) or after the



Sources: The Baltimore Fresh Fruit & Vegetable Wholesale Market Prices-1989, 1990, 1991.

**Figure 5.** Weekly price indices for Maryland-grown bell peppers as a percentage of the seasonal price in the Baltimore region, 1989-91.

first week in September (week 36), they would receive above average prices and avoid the oversupply of produce in the market during August when prices are below average.

This strategy is not risk-free (Best and Brooker). Harvested fresh produce tends to flood the market and depress prices during times that are best for maximum yields. Planting earlier than normal or later than normal can subject the crop to intemperate weather that is not conducive for high yields. If yields are reduced, the farmer's unit cost of production increases. With higher costs per unit and less tonnage of vegetables to sell, it is conceivable that a farmer's profit per acre could be less, even with higher prices.

It is also possible to participate in marketing windows by taking produce planted at the normal time and selling to more northern markets early in the season and more southern markets late in the season. Since the farmer is following normal planting dates, he or she would not be subjecting the crop to undue weather pressure. However, in this case, transportation costs would increase. The farmer must evaluate whether the increase in transportation costs is outweighed by higher prices.

Even with these concerns, the price rewards in recognizing and participating in marketing windows can be significant. Farmers should

examine historical price data from their markets to identify marketing windows that could prove profitable.

## Conclusion

Given local farmers' proximity to the Baltimore-Washington region, there are tremendous opportunities for expansion in produce acreage. While direct marketing remains a viable option for many, there are also opportunities for increased wholesaling. For farmers who use wholesalers or brokers, proper packing and grading is a must. For those who wish to sell directly to produce retailers or food service providers, proper grading and packing, sales, and delivery are all important. A farmer can gain an additional premium for his or her produce by identifying marketing windows, that is, periods of time when the supply of produce is relatively low compared to demand and, as a result, prices are higher. A farmer can make use of these marketing windows by shifting planting dates or selling to more northern markets early in the season and more southern markets late in the season.

## References

- Best, M. J. and J. B. Brooker. 1991. *Marketing Windows and Price Risk: Considerations for Tennessee Vegetable Growers*. Bulletin 681. The University of Tennessee Experiment Station; Knoxville.
- Brooker, J. B. 1983. *Purchasing Practices of Wholesale Produce Handlers in Tennessee*. RR. No. 83-03. University of Tennessee Agricultural Experiment Station; Knoxville.
- Federal/State Market News Service. 1990. *The Baltimore Fresh Fruit and Vegetable Wholesale Market Prices—1989*. USDA-AMS Fruit and Vegetable Division; Washington, DC.
- Federal/State Market News Service. 1991. *The Baltimore Fresh Fruit and Vegetable Wholesale Market Prices—1990*. USDA-AMS Fruit and Vegetable Division; Washington, DC.
- Federal/State Market News Service. 1992. *The Baltimore Fresh Fruit and Vegetable Wholesale Market Prices—1991*. USDA-AMS Fruit and Vegetable Division; Washington, DC.

Garreau, J. 1991. **Edge City**. Bantam Doubleday Dell Publishing Group Inc.; New York, New York.

Hanson, J. C. and D. J. Rada. 1992. *Developing a Wholesale Marketing Strategy for Produce in the Mid-Atlantic Region*. Informational Series No. 209201. Department of Agricultural and Resource Economics, University of Maryland at College Park.

Hinson, R. and K. Lanclos. 1988. *Wholesale Market Opportunities for Louisiana*. A.E.A. Information Series Numbers 65, 66, and 67. Louisiana State University, Louisiana Agricultural Experiment Station; Baton Rouge.

How, R. B. 1991. **Marketing Fresh Fruits and Vegetables**. Van Nostrand Reinhold; New York, New York.

Runyan, J.L., J.P. Anthony, Jr., K.M. Kesecker, and J.S. Ricker. 1986. *Determining Commercial*

*Marketing and Production Opportunities for Small-Farm Vegetable Growers*. Agricultural Marketing Service, Research Report 1146. USDA; Washington, DC.

Staff. June 1992. "Marketing Study Issue." *Food World* pages 14,18, and 28.

Sulecki, J.C. June 1992. "Narrow the Price Gap." *American Vegetable Grower*.

## **Acknowledgments**

The authors appreciate the contributions of the Mid-Atlantic Produce Project (MAPP), which includes members representing the farm community, departments of agriculture, and Cooperative Extension Services in Maryland, Pennsylvania, Virginia, and West Virginia. MAPP receives financial support from the USDA-Federal State Marketing Improvement Program.