

# Small-Scale Grower Cooperatives in the Northeast United States

A Study of Organizational Characteristics, Manager, Member  
and Director Attitudes, and the Potential for Improving Regional  
Inter-Cooperative Collaboration



## Abstract

Between 1999 and 2001, managers, directors, and grower members of 25 small-scale fruit and vegetable cooperatives (annual gross sales of \$10M or less) in the Northeast United States were surveyed to learn about their organizational characteristics, management strategies, and impacts on members. The results show the critical importance of small-scale cooperatives to their members, and members' farms and families, as well as reveal small-scale grower cooperative organizational fragility and vulnerability. Among the important challenges identified are a general lack of manager stability, underdeveloped business management skills, and maintaining member commitment. However, many respondents are interested in working together to better their industry, and potential areas for such inter-cooperative activities are identified.

**Key words:** cooperatives, small-scale, fruits and vegetables, northeast, statistics, issues, federation.

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On the Cover: Checking on a shipment of Tuscarora Organic Growers (TOG) cooperative hothouse tomatoes in Pennsylvania are from the right: TOG member Mick Kodner of Dancing Creek Farm, TOG member Tim Derstine of Hares Valley Growers, Seth Kodner (Mick's son) and Teresa Showalter, TOG Operations Manager. Photo by TOG Manager Chris Fullerton, courtesy TOG.

## Preface

In the last two decades the number of small-scale fruit and vegetable cooperatives (with sales of \$10 million or less) in the Northeastern United States rose significantly. The growing demand for high-quality fresh and processed produce, coupled with farmers' needs for alternative sales outlets, has fueled the interest of local agencies and non-governmental organizations seeking innovative agricultural development opportunities.

The purpose of this study, funded by a cooperative research agreement with the USDA Rural Development-Cooperative Programs, was to examine critical small-scale fruit and vegetable cooperative management and organizational factors, and explore ways in which these cooperatives could work together. The data for this study came from a series of surveys of small-scale cooperative managers, their directors, and farmer members. This report is intended for use by cooperative managers, directors, and members, and for advisors who wish to assist new or established cooperatives in the region or in other areas of the United States where there is interest in supporting family farms.

### Acknowledgments

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This publication is written in memory of Carol Stull; former director and founding member of the Finger Lakes Organic Growers Cooperative, whose strong spirit and lasting dedication to the cooperative movement will be long appreciated and remembered.

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# SMALL-SCALE GROWER COOPERATIVES IN THE NORTHEAST UNITED STATES

## A Study of Organizational Characteristics, Manager, Member and Director Attitudes, and the Potential for Improving Regional Inter-Cooperative Collaboration

### Introduction

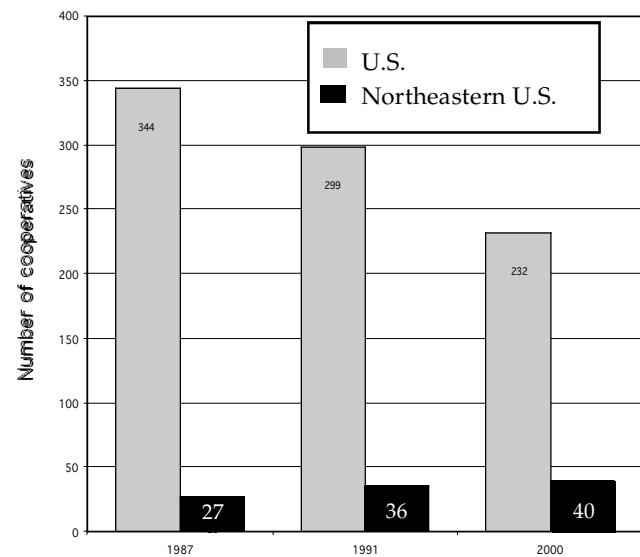
#### Small-Scale Growers' Cooperatives on the Rise in the Northeast U.S.

The 12-state region of the Northeastern U.S. presently supports about 40 fruit and vegetable growers' cooperatives, a dramatic rise since 1987, when there were 27. The region is home to some of the Nation's oldest fruit and vegetable cooperatives which started during the Great Depression as a way to help struggling family farmers survive. "Small-scale cooperatives," which are defined here as those with less than \$10 million in sales per year, numbered 35 (in 2000) in the Northeast, but only represent 1.8 percent of the region's \$3.3 billion in fruit and vegetable cooperative sales (including value-added), and only 3.9 percent of total regional fresh fruit and vegetable sales. Because of their national markets and value-adding activities, large grower cooperatives like Ocean Spray and National Grape (Welch's) currently constitute the lion's share in production and sales.

Table 1 shows the change in the number of fruit and vegetable growers' cooperatives in the Northeast compared to the United States overall between 1987 and 2000. While the number of fruit and vegetable cooperatives dropped by a third (32.5 percent) for the United States on the whole, the number in the Northeast region increased by 48 percent during the 13 year period. Thus, the Northeast's share of all fruit and vegetable cooperatives in the U.S. has more than doubled since 1987 – from 7 percent to 17 percent.

The decline of fruit and vegetable cooperatives outside the Northeast coincides with the consolidation

Table 1—Number of Fruit and Vegetable Grower Cooperatives, U.S. and Northeastern U.S., 1987, 1991 and 2000



Source: USDA Rural Development-Cooperative Programs

that has been taking place throughout the food system. The overall attrition of fruit and vegetable cooperatives was noted by Skinner (1982). He theorized that the concentration was linked to more intense market requirements for consistent quantities, qualities, and reasonably stable procurement prices of farm output. Skinner concluded that addressing these market demands efficiently by obtaining economies of size was producing a more contracted cooperative sector.

Table 2—Number of Fruit and Vegetable Cooperatives By Sales Volume, Northeast U.S., 1994 and 2000

Sales category (\$1,000s)	1994		2000		Percent change, 1994 to 2000
	# Cooperatives	% of total	# Cooperatives	% of total	
Less than \$500	14	33%	18	45%	28.57%
\$500 to \$1,999	6	14%	7	18%	16.67%
\$2,000 to \$2,449	3	7%	2	5%	-33.33%
\$2,500 to \$4,999	5	12%	4	10%	-20.00%
\$5,000 to \$9,999	7	17%	4	10%	-42.86%
Subtotal of \$9,999 or less	35	83%	35	88%	0.00%
\$10,000 or more	7	17%	5	12%	-28.57%
Total	42	100%	40	100%	-4.76%

Source: USDA, Rural Development-Cooperative Programs.

The Northeast, however, has not been immune to the trend in fruit and vegetable cooperative mergers, acquisitions, and business failures (Table 2).

A closer look at the data is necessary to better understand the trends. While the total number of fruit and vegetable cooperatives in the Northeast dropped by 2 between 1994 and 2000, the number of small-scale cooperatives remained the same at 35 (the number starting equaled the number exiting). Furthermore, the share of cooperatives by sales class under \$10 million has shifted dramatically. The increase in the number of the “micro-cooperatives” (with less than \$2 million in sales) has maintained small-scale cooperative numbers. Micro-cooperatives are presumably filling market niches (e.g., organic blueberries, specialty produce) not satisfied by larger cooperatives as well as mass market grower-shippers and distributors.

An analysis of total and mean sales per cooperative between 1994 and 2000 shows that despite some consolidation in regional fruit and vegetable cooperatives, total sales are up significantly (Table 3).

The distribution across sales categories indicates that most sales volume is through large cooperatives. Fruit and vegetable cooperatives with less than \$10 million in sales, for example, accounted for over three-quarters (87.5 percent) of the total number of cooperatives, but had only 1.8 percent of total regional cooperative sales—down from 3 percent in 1994. This shrinkage is due to the increased number of micro-

cooperatives coupled with a decline in the number and sales of cooperatives in the larger small-scale cooperative classes.

### Fruit and Vegetable Demand Is Up

One of the likely factors leading to the rise in small-scale grower cooperatives is the growth of produce consumption. From 1976 to 2000 vegetable consumption (fresh and processed) increased 28.0 percent, from 359.2 lbs per capita to 459.8 lbs. Meanwhile, non-citrus fruit consumption (fresh and processed) grew from 263.8 lbs per capita to 295.4 lbs, an increase of 12 percent (Carman et al., 2004.) Consumer concerns about health and nutrition are generally credited for the increases. The USDA and the Cooperative Extension Service in particular, is promoting more healthful diets through the use of food pyramids and other food guides, which encourage increased plant-based food consumption. Fruit and vegetable consumption trends and public policies that support direct marketing activities (farmers' markets, roadside stands, and u-pick) are likely to continue. However, despite these trends, comparatively little public policy has focused on cooperatives of any size in meeting the growing demand for fresh, high-quality fruits and vegetables.

**Table 3—Total Sales and Mean Sales of Fruit and Vegetable Cooperatives by Sales Volume, Northeast U.S., 1994 and 2000**

Sales volume (\$1,000s)	1994			2000		
	Sales (\$1,000s)	% of Total	Mean Sales per Cooperative	Sales (\$1,000s)	% of Total	Mean Sales per Cooperative
Less than \$500	\$1,689	0	\$120.6	\$2,817	0.1	\$156.5
\$500 to \$1,999	4,325	0	720.9	8,057	0.2	1,151.0
\$2,000 to \$2,449	3,360	0	1,119.8	4,675	0.1	2,337.3
\$2,500 to \$4,999	19,864	1	3,972.7	13,805	0.4	3,451.3
\$5,000 to \$9,999	50,363	2	7,194.7	28,916	0.9	7,229.0
\$10,000 or more	2,035,529	97	290,789.9	3,211,217	98.2	642,243.3
<b>Total Sales</b>	<b>\$2,115,130</b>	<b>100</b>	<b>\$50,360.2</b>	<b>\$3,269,487</b>	<b>99.9</b>	<b>\$81,737.1</b>
\$9,999 or less	\$79,601	3	\$2,274.3	\$58,268	1.8	\$1,664.8

Source: USDA, Rural Development-Cooperative Programs.

<sup>2</sup>Does not include sales of other products, service receipts and other income.

## Purpose

While the growth in the number of small-scale cooperatives in the Northeast since the 1980s suggests a possible robustness, past research on fruit and vegetable cooperatives points to a number of challenges – low volumes, high operating costs, finding and retaining skilled managers, and an extremely competitive marketplace. It was the intention of this study to gain a greater understanding of the key issues affecting small cooperatives, provide guidance for formulating regional development strategies and policies, and to better realize the potential of small growers' cooperatives in the Northeast.

Research objectives included increasing the knowledge about Northeastern small-scale fruit and vegetable cooperatives' structures and organizational needs, competitiveness, member issues and concerns, impacts on farm families, and the prospects for promoting inter-cooperative relations. Hopefully, the results of this project will be used by small fruit and vegetable cooperatives to improve their viability and success in meeting their own goals. Furthermore, we think that Extension staff and others can use these findings to meet the needs of the fruit and vegetable growers more effectively. Moreover, land-grant

researchers may also find the results useful in identifying additional opportunities for both applied and theoretical research on cooperatives.

## Literature Review

Little research has been conducted on small-scale fruit and vegetable cooperatives in the Northeast. What research has been conducted has focused largely on economics and business management practices. In a study of Vermont grower cooperatives, for example, Henehan and Pelsue (1986) found that manager experience and the adoption of a multiyear business plan were key variables that influenced sales growth. Lewis (1989) studied operating costs and concluded the keys to successful fruit and vegetable cooperatives are management and product quality.

Hulse, Biggs and Wissman (1990) studied the organization and operations of 34 small-scale fruit and vegetable cooperatives across the U.S. (with annual sales of \$1 million or less) using different sales methods as the basis of comparison. Observing that cooperatives with below-average sales had a higher failure rate, they concluded that sales volume may be associated with small-scale cooperative survival. Hulse et al. also examined how these small cooperatives served the needs of their members, and how new cooperatives might be started to provide producers with mar-

keting, supply purchasing, or other services. They found diversity in membership, organizational structure, and management. To gain insights into the causes of failure, they conducted case studies of four fruit and vegetable cooperatives that had failed. Among the reasons they found were inability to reconcile differences of opinion among directors, members and management; growers' sales to the cooperative only when the price was right; difficulty in persuading growers to pack produce to buyers' specifications; poor location; low volume; decline in active membership; local decline in vegetable farming; termination of supporting grants; grower production inexperience; costly hired help (for growers or cooperative); and lack of understanding of cooperative philosophy and operation. Common to all four of the failed cooperatives was a lack of member commitment to the cooperative.

Biggs (1990) found that, despite accounting for only 4 percent of the principal fresh vegetables produced in the U.S., vegetable cooperatives made a significant contribution to the rural economies in which they operated. However, he also noted several problems faced by small cooperatives. Competition from producers in other areas appeared to be important for the fresh vegetable cooperatives-including areas from within the U.S. as well as other countries. Local oversupply of fresh vegetables can become a problem when regional growers over-plant or row-crop farmers (such as corn and soybean producers) suddenly change to vegetables, thus glutting the market. Shortages of workers caused by immigration policies, and problems with marketing, quality, and transportation were among the other issues frequently reported by grower cooperatives across the nation.

Bhuyan et al. (2001) reported that more and more fruit and vegetable cooperatives had difficulties in meeting member expectations and satisfying cooperative principles while striving to be competitive. In their study of New York, New Jersey, and Pennsylvania fruit and vegetable cooperative members and managers, they found that, while managers questioned member loyalty, members showed dissatisfaction with the leadership and skills of their cooperative's management and board of directors. They recommended improvements in communication and management business skills are needed, and that business strategies such as finding new markets, sales promotion, cooperation among cooperatives and/or mergers, price discrimination based on a standardized attribute (e.g., product quality), need to be explored.

In their annual national cooperative survey, Gray and Kraenzle (2001) found that managers of small-

scale cooperatives in general (with revenues of less than \$10 million) cited increasing costs, weather and competition as their leading problems. They less frequently cited operational difficulties and low margins than did cooperatives overall. Low commodity prices, operational difficulties, the agricultural economy, and competition were the most frequently mentioned problems that managers of marketing cooperatives faced.

The literature suggest that small-scale fruit and vegetable cooperatives in the Northeast struggle with a wide range of issues, but still have the potential to offer crucial benefits to farmers and rural areas. Few studies have provided detailed descriptive analyses of small-scale cooperatives' managers and members in the Northeast, or have pointed to practical solutions to cooperative problems through improving regional intercooperative relations.

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## Methods

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For the purposes of this study, "small-scale" fruit and vegetable marketing cooperatives are defined operationally as member-owned marketing businesses with \$10 million in sales per year or less. The "Northeast U.S." was defined as the six states of New England as well as New York, Pennsylvania, New Jersey, West Virginia, Delaware, and Maryland. A base list of cooperatives was generated by the USDA Rural Development-Cooperative Programs from data collected in its annual census of cooperatives in the U.S. in 1999. Through networking with cooperative managers and other key informants, several additional marketing cooperatives were added to this list.

To get the most complete information about the cooperatives, we created three survey instruments: one each for managers, directors, and members. We followed generally accepted survey procedures modified from Dillman (1978). An advisory committee comprised of cooperative managers and technical assistance providers worked with the investigators in developing and testing the questionnaires. Prior to conducting the surveys we received a formal review and approval from the Cornell University Committee on Human Subjects. We provided assurances to respondents that their identities would be kept confidential and that completing the survey would pose minimal risk for the cooperative or individual members to be harmed or embarrassed.

Cooperative managers were first contacted by phone for the dual purposes of ensuring that their cooperatives qualified for the study, and of recruiting

managers to assist with surveying their directors and members. A questionnaire was then sent to managers, accompanied by a cover letter explaining the study, with a follow-up reminder postcard sent a week later. A second mailing was sent to those who did not respond in the first wave. Follow-up calls were made to managers whose questionnaires were not complete. In addition to the questionnaires, we requested copies of financial documents of the previous year (1998), including operating statements and a balance sheet. We asked managers for the entire mailing list of their cooperative members, and one director was recruited from each cooperative. Member and director surveys were conducted in 1999 and 2000, using similar procedures as for managers.

The data were entered and verified using the SPSS Data Entry package. As a basis of comparison to aid in descriptive analysis; cooperatives, members, and managers were broken down into the following types:

<b>Cooperative Products</b>	<b>Cooperative Sales Volume</b>
Fruit Cooperative	<\$500K in Sales
Vegetable Cooperative	<\$500K in Sales
Mixed Cooperative	
<b>Manager Type</b>	<b>Farm Type</b>
Paid	Primary
Volunteer	Occupation
	Part-time
	Retired

### Limitations of Methods

The value and accuracy of the data in this study rely on participants' willingness to divulge business and personal information. We believe the information reported by the respondents to be reasonably accurate. We acknowledge the possibility that some respondents either did not have accurate information about their cooperatives or farms, or did not wish to provide accurate information. In our experience, however, most reluctance to disclose information has been overcome by emphasizing the value of the resulting study and by providing written assurances that participants' identities will not be revealed.

A second limitation to the accuracy of the data is data interpolation. In some instances we asked respondents to categorize their response (e.g., selecting a given sales category for their cooperative). This is done sometimes to encourage respondents to provide some information that might be considered proprietary. To calculate the means of such data we assumed the response to be the midpoint of the category, knowing that the real number could be above or below that number within the given range of the category.

A third limitation to the accuracy of the data is subjectivity of the investigators. In several instances we asked open-ended questions. It is possible that responses to these questions could have been misinterpreted. We attempted to minimize this problem by having more than one individual review and code the data.

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## Results and Discussion

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### Response Rates

In collaboration with the USDA Rural Business-Cooperative Service we compiled an initial list of 49 small-scale fruit and vegetable businesses presumed to be cooperatives. Of these, we determined by phone that 35 firms qualified as being cooperatives with annual sales volume of \$10 million or less in the previous year (1998). Of the 35 qualifying cooperatives, 29 managers responded to our mailed survey, for a response rate of 82.9 percent (see Table 4).

We asked each responding manager to identify a director to whom we could send the directors' questionnaire. Not all responding cooperatives had directors, nor were all managers comfortable in sharing directors' contact information. Sixteen directors of the 26 cooperatives with boards responded to our directors' survey. We had a similar experience with managers in surveying members. Nineteen of the 29 cooperatives provided their membership lists, yielding a total of 592 members. Of this sample, 273 responded to our mailed questionnaire – for a response rate of 46 percent. Of these, however, 47 were not members of their cooperative in 1998, and so only 226 finally qualified for the analysis.

### Sample Bias

We are generally satisfied that this sample represents the population of small-scale fruit and vegetable cooperatives in the Northeast. The mean income of small-scale grower cooperatives in our study (\$1.77 million) was comparable to the mean income reported

Table 4—Response Rate and Final Sample Count by Survey

	# of respondents	Response rate	# used in analysis
Manager survey	29 of 35	82.9%	25
Director survey	16 of 26	62.0%	16
Member survey	273 of 592	46.0%	204

Table 5—Number of Cases by Cooperative Type

Cooperative type	# in NE (99)	# in Sample	# Providing membership	# Members responding
Fruit	16	14 (87.0%)	8	141
Vegetable	11	4 (36.0%)	4	26
Mixed	8	7 (87.5%)	5	57
Total	35	25 (71.5%)	17	204

Table 6—Cooperative Type by State

Cooperative type	State of Location						Total
	MA	ME	NJ	NY	PA	VT	
Fruits	1	5	2	4	1	1	14
Vegetable		1	1	1	1		4
Mixed	1	1	1	2	1	1	7

by cooperatives in the USDA's national cooperative survey data for 1999 (\$1.66 million). We were able to get 14 of 16 (87 percent) known small-scale fruit cooperatives to respond, as well as 7 of 8 (87.5 percent) known mixed cooperatives (Table 5).

However, only 4 of 11 known vegetable cooperatives (36 percent) participated in the study. Furthermore, our sample may under-represent cooperatives in the larger sales categories (between \$5 and \$10 million); according to the USDA annual survey of cooperatives, there were four cooperatives in this category in 1999, but only two participated in our study. Given these potential limits to generalizability, we

have been prudent in how we reported the data, and we encourage others to exercise caution about over-generalizing (especially about vegetable cooperatives) while interpreting or reporting the results.

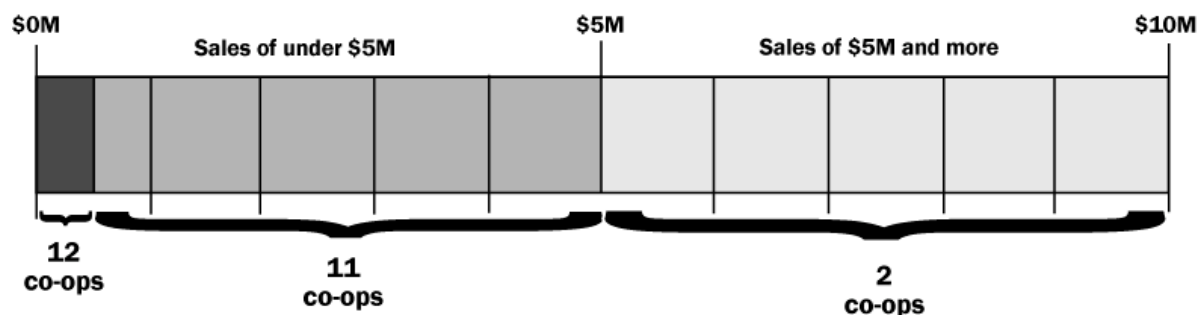
The breakdown of cooperatives in the sample by state location (Table 6) reveals that only half the states in the Northeast have small-scale cooperatives represented. Maine and New York tied for the most cooperatives (7), quite likely because of their relatively large fruit and vegetable industries.

The following three sections provide selected results from the manager, director, and member surveys.

Table 7—Responding Cooperative General Characteristics

Cooperative type	Means sales, 1998 (millions of \$)	Years Operating (mean)	# Members in 1998 (mean)	# Full-time, year-round workers (median)	Total acreage committed to product, 1998 (median)	# of crops handled (mean)	# (%) organic	% with paid cooperative manager
Fruit	1.86	33.8	39.0	1.0	650.0	1.4	3 (21.4)	50.0
Vegetable	2.77	43.8	71.8	3.0	1,200.0	40.5	1 (25.0)	75.0
Mixed	1.00	14.9	49.9	1.0	95.0	83.7	4 (57.1)	85.7

Figure 1—Distribution of Responding Cooperative Sales



## SECTION 1 General Characteristics of Small-Scale Grower Cooperatives in the Northeast

The Northeastern small-scale fruit and vegetable cooperatives in the study averaged slightly less than 50 members, and only 2 full-time year-round employees (Table 7). The average sales were approximately \$1.77 million per cooperative: vegetable cooperatives averaged \$2.77 million, fruit cooperatives averaged \$1.86 million, and mixed cooperatives averaged \$1 million. About one-third (32 percent) marketed organic products. Most (80 percent) were incorporated and had formal boards of directors (87.5 percent). Two-thirds (64 percent) had paid managers (including all of the incorporated cooperatives).

Half of small-scale **fruit cooperatives** had volunteer managers. Perhaps this is because they tend to specialize in only one or two crops and then sell to relatively few buyers, and were able to keep their man-

agement structures simple and informal. Fruit cooperatives were also the least likely to be organic, perhaps because of the challenges of growing organic fruits.

Small-scale **vegetable cooperatives** that responded (4) are older and larger than other small-scale cooperatives in the region, averaging three times the age of mixed cooperatives and twice the median size in total acreage committed to production of fruit cooperatives. Not surprisingly, they also reported more full-time, year-round employees.

On average, **mixed cooperatives** are the youngest of the cooperative types, averaging just about 15 years old. Their mean membership size is about on par with the other cooperative types, but the acreage committed to production is a fraction of the others. Mixed cooperatives, however, tended to be more likely to deal in organic products (57.1 percent). They are also more diverse in their product offerings than were the other types of cooperatives, handling an average of over 80 crops in a season.

Table 8—**Cooperative Sales Volume**

Cooperative type	1998 sales (% within product type)					Total
	Less than \$99,999	\$100K to \$499K	\$500K to \$1.49M	\$1.5M to \$4.9M	\$5M and over	
Fruit	3 (21.4)	4 (28.6)	1 (7.1)	5 (35.7)	1 (7.1)	14 (100.0)
Vegetable	1 (25.0)	1 (25.0)		1 (25.0)	1 (25.0)	4 (100.0)
Mixed		3 (42.9)	3 (42.9)	1 (14.3)		7 (100.0)
<b>Total</b>	<b>4 (16.0)</b>	<b>8 (32.0)</b>	<b>4 (16.0)</b>	<b>7 (28.0)</b>	<b>2 (8.0)</b>	<b>25 (100.0)</b>

Table 9—**Organizational Structure and Strategic Planning by Cooperative Type**

Cooperative type	Number and percent of cooperative				
	Incorporated	Have board of directors	Have a strategic plan	Conducted feasibility study	Prepared a business plan
Fruit	10 (71.4)	11 (84.6)	2 (33.3)	3 (21.4)	3 (21.4)
Vegetable	4 (100.0)	4 (100.0)			
Mixed	6 (85.7)	6 (85.7)	4 (66.7)	1 (14.3)	1 (14.3)
<b>Total</b>	<b>20 (80.0)</b>	<b>21 (87.5)</b>	<b>6 (24.0)</b>	<b>4 (16.0)</b>	<b>4 (16.0)</b>

### Small-Scale Fruit and Vegetable Cooperative Sales

Twenty-three of 25 cooperatives responding had sales under \$5 million, and 12 cooperatives were under \$500,000 in annual sales. Only two cooperatives had sales between \$5 million and \$10 million. This distribution of cooperative sales volume compares favorably with USDA Rural Development survey data on similar cooperatives.

Small-scale cooperatives were, however, broadly distributed across sales categories under \$5 million, with the most frequent categories being \$100,000 to \$499,000 (32 percent) and \$1.5 million to \$4.9 million (28 percent).

### Organizational Structure and Planning

Eighty percent of the cooperatives were incorporated, and 87.5 percent had boards of directors. Only 4 of 25 cooperatives (16 percent) reported that they had conducted feasibility studies or business plans during

cooperative start-up (Table 9). Likewise, only about one-quarter (6 of 25) currently had strategic plans. However, several managers were unsure about their organizational planning activities at start-up because their cooperatives were formed before their tenures.

### Cooperative Marketing Channels

Cooperatives in the study utilized a fairly narrow set of marketing channels (Table 10). One-third (36 percent) employed multiple strategies. Fruit cooperatives used a wide range of marketing channels, including selling directly to a processor or packing house, or hiring a sales agent to do the same; vegetable cooperatives tended to use a combination of their own sales staff and sales agents who work on commission; mixed cooperatives generally had managers who did most of the marketing activities, such as sales calls to restaurants and supermarkets.



Table 10—Marketing Channel by Cooperative Type

Cooperative type	Type of Marketing Channel				Total
	Direct wholesale	Sales agent	Multiple	Processor	
Fruit	1 (7.1)	5 (35.7)	4 (28.6)	4 (28.6)	14 (100.0)
Vegetable		1 (25.0)	3 (75.0)		4 (100.0)
Mixed	4 (57.1)	1 (14.3)	2 (28.6)		7 (100.0)
Total	5 (20.0)	7 (28.0)	9 (36.0)	4 (16.0)	25 (100.0)

Table 11—Trade Area Geography

Trade area	Number (% share)*
Local (county or adjacent counties)	6 (24.0)
Regional (multicounty area)	7 (28.0)
Statewide	6 (24.0)
Multistate (two or more states)	9 (36.0)
Northeast region	11 (44.0)
Other US regions	2 (8.0)
USA	6 (24.0)
Export	3 (12.0)

\*Respondents could indicate more than one trade area

### Trade Area and Market Share Trends

Almost half of small-scale fruit and vegetable cooperatives considered the entire Northeast region to be part of their trade area (Table 11). Fruit cooperatives had the largest trade areas, including “Northeastern regional,” “national,” and “export” markets. Vegetable cooperatives, on the other hand, tended to have multi-state markets. Reflecting their size diversity, some mixed cooperatives’ trade areas were split between substate regional (e.g., multicounty), while others covered the Northeast region.

Managers were asked to characterize their cooperatives’ market share trends, using “growing,” “declining,” “stable,” or “not sure” to describe their co-ops’ share of total wholesale fruit and vegetable sales in their trade area. On the whole, less than half the cooperatives reported having growing market shares (Table 12). However, while vegetable and fruit cooperatives showed varying trends, most mixed cooperatives (5 of 6 responding) reported having a growing market share.

### Sales Trends

Over half of the respondents (54.5 percent) indicated that their sales are increasing, including three of four vegetable cooperatives (Table 13). Nine of 22 respondents (40.9 percent) however reported declining or unstable sales.

As one would expect from the analysis of market share and sales trends, cooperatives with increasing market share tended to have increasing sales. Conversely, those with declining market share tended also to have declining or unstable sales.

### Seasonality of Cooperative Sales

Managers were asked to report the months of the year that they were selling products. Figure 2 depicts the mean percentage of cooperatives actively selling products during each month. The data suggests mixed cooperatives are more active through the year than either fruit or vegetable cooperatives. Most vegetable cooperatives were selling from midsummer through the fall, while fruit cooperatives’ sales peak in late summer. This is probably due to the quick harvest and sale of fruit products at their peak of quality and ripeness. Several cooperatives brought in complementary products (such as shellfish, flowers, and citrus) to meet customer needs during the winter and to maintain a cash flow that supported their cooperative staff.

### Small-Scale Cooperative Competitive Advantages

According to 83.3 percent of responding managers, “quality” was the single strongest competitive advantage their cooperatives had, followed by “service” (58.3 percent) and “products offered” (54.2 percent) (Table 14). Almost three-quarters (71.4 percent) of mixed cooperatives indicated that they benefited from being “locally based.”

Table 12—**Market Share Trends**

Cooperative type	Market share trends in trade area (% within Cooperative type)				Total
	Growing	Declining	Stable	Not sure	
Fruit	4 (30.8)	4 (30.8)	5 (38.5)		13 (100.0)
Vegetable	1 (25.0)	1 (25.0)	1 (25.0)	1 (25.0)	4 (100.0)
Mixed	5 (83.3)		1 (16.7)		6 (100.0)
Total	10 (43.5)	5 (21.7)	7 (30.4)	1 (4.3)	23 (100.0)

Note: Only 23 of 25 cooperative managers answered this question.

Table 13—**Sales Trends**

Cooperative type	Sales trend category (% within market share)			Total
	Increasing	Stable	Declining or unstable	
Fruit	6 (50.0)		6 (50.0)	12 (100.0)
Vegetable	3 (75.0)		1 (25.0)	4 (100.0)
Mixed	3 (50.0)	1 (16.7)	2 (33.3)	6 (100.0)
<b>Market share</b>				
Declining	1 (20.0)		4 (80.0)	5 (100.0)
Stable	4 (44.4)	1 (11.1)	4 (44.4)	9 (100.0)
Growing	6 (85.7)		1 (14.3)	7 (100.0)
Not sure	1 (100.0)			1 (100.0)
Total	12 (54.5)	1 (4.5)	9 (40.9)	22 (100.0)

Note: Only 22 of 25 cooperatives managers answered this question.

### Growth Strategies

Roughly three-quarters of the cooperatives (72 percent) reported having some type of growth strategy (including downsizing); however, seven fruit and vegetable cooperatives (no mixed) indicated they do not measure growth at all. Seventy-one percent of mixed cooperatives, on the other hand, reported “aggressive” growth strategies. Most cooperatives that had growth goals were meeting them.

### Growth Goals

About 70 percent of cooperatives reported that they were achieving their growth goals (whatever those might be). A larger share of mixed cooperatives indicated they were achieving their growth goals, as did a larger share of cooperatives with sales greater than \$500,000.

Figure 2—Cooperative Sales by Month and Type

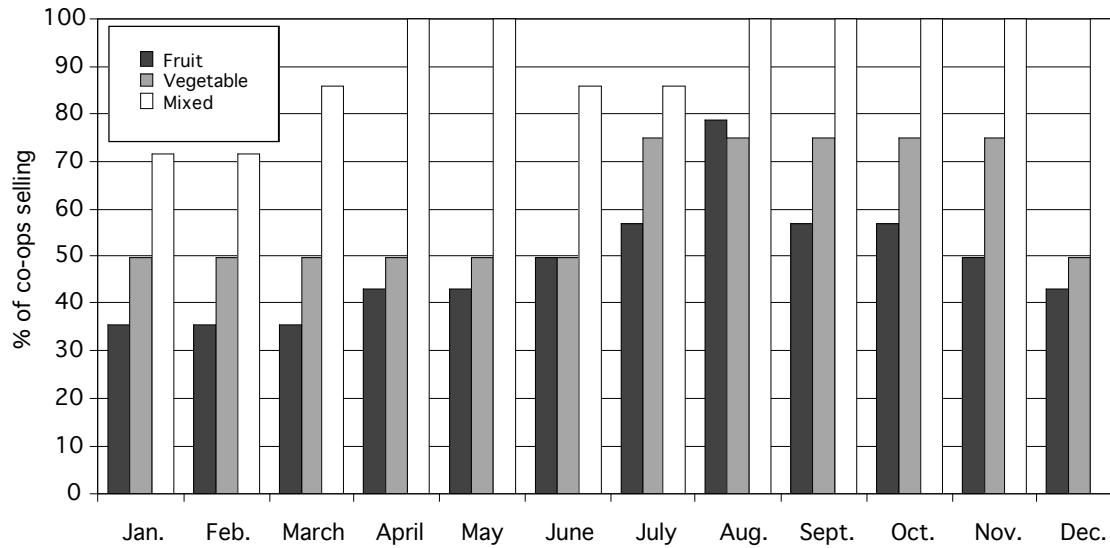


Table 14—Competitive Advantages Reported by Cooperative Type

Cooperative type	Competitive advantages (% within cooperative type)					
	Quality	Service	Products offered	Being locally based	Price	Size
Fruit	9 (69.2)	5 (38.5)	5 (38.5)	2 (15.4)	2 (15.4)	1 (7.7)
Vegetable	4 (100.0)	3 (75.0)	2 (50.0)			1 (25.0)
Mixed	7 (100.0)	6 (85.7)	6 (85.7)	5 (71.4)	2 (28.6)	2 (28.6)
<b>Total</b>	<b>20 (83.3)</b>	<b>14 (58.3)</b>	<b>13 (54.2)</b>	<b>7 (29.2)</b>	<b>4 (16.7)</b>	<b>4 (16.7)</b>

Note: Managers could report more than one advantage.

### Sources of Information and Technical Assistance

Small-scale fruit and vegetable cooperatives reported using a wide range of information and technical assistance sources. The leading source of help was from Cooperative Extension (68 percent), followed by accountants (52 percent) and publications (40 percent). Mixed cooperatives, additionally, reported a greater use of “other cooperatives” (71.4 percent).

### Accounting Software Utilization

Managers were asked to describe the accounting information management software they use. Table 20 shows that “off the shelf” accounting software was used most commonly by the 16 cooperatives reporting using software.

Table 15—Growth Strategies by Cooperative Type

Cooperative type	Describe cooperative's growth strategy (% within product type)					
	Aggressive	Moderate	Grow at level of inflation	Plans to downsize	Cooperative does not measure growth	Does not measure growth, plans to downsize
Fruit	3 (21.4)	3 (21.4)	2 (14.3)	1 (7.1)	4 (28.6)	1 (7.1)
Vegetable		1 (25.0)	1 (25.0)		2 (50.0)	
Mixed	5 (71.4)	2 (28.6)				
<b>Total</b>	<b>8 (32.0)</b>	<b>6 (24.0)</b>	<b>3 (12.0)</b>	<b>1 (4.0)</b>	<b>6 (24.0)</b>	<b>1 (4.0)</b>
Cooperative achieving growth goals	7 (43.8)	5 (31.3)	2 (12.5)		2 (12.5)	

Table 16—Growth Goals Achievement

Cooperative type	Cooperative is achieving growth goals (% of category)		Total
	Yes	No	
Fruit	8 (61.5)	5 (38.5)	13 (100.0)
Vegetable	2 (66.7)	1 (33.3)	3 (100.0)
Mixed	6 (85.7)	1 (14.3)	7 (100.0)
<b>Total</b>	<b>16 (69.6)</b>	<b>7 (30.4)</b>	<b>23 (100.0)</b>
Sales category			
<\$500K	6 (60.0)	4 (40.0)	10 (100.0)
>\$500K+	10 (76.9)	3 (23.1)	13 (100.0)
<b>Total</b>	<b>16 (69.6)</b>	<b>7 (30.4)</b>	<b>23 (100.0)</b>

Note: only 23 of 25 cooperative managers answered this question.

Table 17—**Information and Technical Assistance**

Cooperative type	# of cooperatives receiving assistance from sources (% within cooperative type)*							
	Cooperative Extension	Accountants	Publications	Consultants	Other cooperatives	Universities	Attorneys	Other organizations
Fruit	9 (64.3)	8 (57.1)	6 (42.9)	6 (42.9)	3 (21.4)	5 (35.7)	4 (28.6)	3 (21.4)
Vegetable	3 (75.0)	2 (50.0)	1 (25.0)	1 (25.0)		1 (25.0)	1 (25.0)	
Mixed	5 (71.4)	3 (42.9)	3 (42.9)	1 (14.3)	5 (71.4)	1 (14.3)	1 (14.3)	1 (14.3)
Total	17 (68.0)	13 (52.0)	10 (40.0)	8 (32.0)	8 (32.0)	7 (28.0)	6 (24.0)	4 (16.0)

\*Cooperative managers could report more than one source.

Table 18—**Accounting Software Utilization**

Accounting Software	# Using	Notes
Off the shelf	11	Off-the-shelf software in use includes Peachtree, Microsoft Excel, Quicken, QuickBooks 99, Mind Your Own Business, and SBT Accounting.
Custom	4	Custom software is generally designed by a software engineer for a particular cooperative client.
Specialized	1	Commercially available programs specifically for produce handlers: Granite State Software.

## SECTION 2 General Characteristics of Managers

### Cooperative Manager Characteristics

Managers were asked about their personal characteristics and experiences. As Table 21 shows, small-scale cooperative managers can be generally characterized as highly educated middle-aged males with more than a decade of experience (paid managers, 14.5 years; volunteer managers, 8.8 years). Over half of the managers (56.5 percent) had previous cooperative experience before taking their current positions.

### Cooperative Manager Strengths and Weakness

“Human relations” and “organization” were top strengths reported by managers (Table 22). Only two reported having strong “financial” and “marketing/sales” skills. Paid and unpaid managers

displayed different skill sets. Perhaps because they deal with one crop and few markets, fruit cooperatives tended to have volunteer managers.

Perhaps because so many were volunteers, a third of fruit cooperative managers reported needing to improve their delegation and organization skills (Table 23). Few managers overall indicated difficulty with marketing and finances. There were no significant differences between paid and volunteer managers in perceived need for management improvements.

### Manager Level of Personal Fulfillment

Cooperative managers, across cooperative types, generally felt positive about their experiences (only one reported a “low” level of fulfillment). Paid managers, however, reported a higher level of fulfillment than volunteers.

Table 19—**Cooperative Manager Demographics**

	Cooperative manager characteristics				
	Age (mean)	% Male	% Having some college	Years as manager (mean)	% With previous cooperative experience
All cooperatives	48.4	84.0%	92.0%	12.5	56.5%

Table 20—**Management strengths**

Cooperative type	Management strengths (% within product type)							
	Human relations	Organization	Versatility	Finances	Marketing/sales	Commitment	Other	Total
Fruit	4 (33.3)	4 (33.3)	2 (16.7)	1 (8.3)			1 (8.3)	2 (100.0)
Vegetable	1 (25.0)					1 (25.0)	2 (50.0)	4 (100.0)
Mixed	2 (28.6)	1 (14.3)	1 (14.3)	1 (14.3)	2 (28.6)			7 (100.0)
<b>Manager type</b>								
Paid	5 (33.3)	1 (6.7)	3 (20.0)	2 (13.3)	1 (6.7)	1 (6.7)	2 (13.3)	15 (100.0)
Volunteer	2 (25.0)	4 (50.0)			1 (12.5)		1 (12.5)	8 (100.0)
<b>Total</b>	<b>7 (30.4)</b>	<b>5 (21.7)</b>	<b>3 (13.0)</b>	<b>2 (8.7)</b>	<b>2 (8.7)</b>	<b>1 (4.3)</b>	<b>3 (13.0)</b>	<b>23 (100.0)</b>

Table 21—**Needed Management Improvements**

Manager type	Improvements needed reported by management (% within product type)							Total
	Delegation	Marketing/Organization	sales	Communi-Finances	Having cation	less to do	Other*	
Paid	4 (28.6)	2 (14.3)	1 (7.1)	2 (14.3)		1 (7.1)	4 (28.6)	14 (100.0)
Volunteer	2 (25.0)	2 (25.0)	2 (25.0)		1 (12.5)		1 (12.5)	8 (100.0)
<b>Cooperative type</b>								
Fruit	4 (33.3)	2 (16.7)	2 (16.7)	1 (8.3)			3 (25.0)	12 (100.0)
Vegetable	1 (33.3)			1 (33.3)	1 (33.3)			3 (100.0)
Mixed	1 (14.3)	2 (28.6)	1 (14.3)			1 (14.3)	2 (28.6)	7 (100.0)
<b>Total</b>	<b>6 (27.3)</b>	<b>4 (18.2)</b>	<b>3 (13.6)</b>	<b>2 (9.1)</b>	<b>1 (4.5)</b>	<b>1 (4.5)</b>	<b>5 (22.7)</b>	<b>22 (100.0)</b>

\* "Other" includes education (general and computer), and how to create interest among farmers.

Table 22—**Level of Manager Fulfillment**

Cooperative type	Level of fulfillment by co-op type			Total
	High	Medium	Low	
Fruit	3 (23.1)	10 (76.9)		13 (100.0)
Vegetable	1 (25.0)	2 (50.0)	1 (25.0)	4 (100.0)
Mixed	2 (40.0)	3 (60.0)		5 (100.0)
<hr/>				
Manager type				
Paid	5 (38.5)	8 (61.5)		13 (100.0)
Volunteer	1 (11.1)	7 (77.8)	1 (11.1)	9 (100.0)
<hr/>				
Total	6 (27.3)	15 (68.2)	1 (4.5)	22 (100.0)

### Managers' Potential Long-Term Opportunities with the Cooperative

Managers were asked to describe their potential long-term opportunities with their respective cooperatives. These responses were coded as “good,” “uncertain,” or “poor.” Despite reasonable levels of fulfillment, 88 percent of managers reported that their long-term opportunities with the cooperative were “uncertain” or “poor” (Table 23). Only 3 of 25 managers (all paid managers) indicated that their opportunities in the long term were “good.” Paid managers were more likely to report “good” long-term opportunities than volunteers. No mixed cooperative managers felt “good” about their futures with their cooperative.

### Future Management/Employment Goals

Managers were asked about their future goals. Over half (52 percent) indicated that they wanted to see some type of growth (e.g., in sales, profits, or market share). However, more than one-third (36 percent) reported that they planned to leave their position (and, in one case, already had done so). Half of the paid managers and nearly forty-three percent each of fruit and mixed cooperatives were preparing to leave.

## SECTION 3 General Characteristics of Members

### Cooperative Member Characteristics

Members of small-scale grower cooperatives in the Northeast can be categorized in several useful ways: by the type of product they produce (e.g., fruit, vegetables, mixed produce), by the status of the operator (e.g., primary occupation, part-time and retired), and by the self-reported level of sales to their cooperative (e.g., above average, about average and below average). Table 25 presents a typology of Northeastern small-scale fruit and vegetable cooperative members. Primary and part-time fruit cooperative members represented the largest share of respondents.

Overall, farming is the primary occupation of over half (54.5 percent) of the cooperative members (Table 25). This compares with 50.3 percent of the principal farm operators of the U.S. farm population in 1997 and 57.5 percent in 2002 (USDA Census of Agriculture). Vegetable and mixed product cooperatives have members whose primary occupation is farming. Fruit cooperatives, however, tended to have more members who were retirement and part-time producers than either vegetable or mixed cooperatives. This is likely because fruit operations are usually a single perennial crop, which may require less management effort.

Table 23—**Manager's Long-Term Opportunities with Cooperative**

Manager's long-term opportunities with cooperative				
Manager type	Good	Uncertain	Poor	Total
Paid	3 (18.8)	9 (56.3)	4 (25.0)	16 (100.0)
Volunteer		6 (66.7)	3 (33.3)	9 (100.0)
Cooperative type				
Fruit	2 (14.3)	7 (50.0)	5 (35.7)	14 (100.0)
Vegetable	1 (25.0)	2 (50.0)	1 (25.0)	4 (100.0)
Mixed		6 (85.7)	1 (14.3)	7 (100.0)
<b>Total</b>	<b>3 (12.0)</b>	<b>15 (60.0)</b>	<b>7 (28.0)</b>	<b>25 (100.0)</b>

Table 24—**Management Future Goals**

Management future goals				
	Growth oriented	Stepping down	Status quo	Total
Cooperative type				
Fruit	6 (42.9)	6 (42.9)	2 (14.3)	14 (100.0)
Vegetable	3 (75.0)		1 (25.0)	4 (100.0)
Mixed	4 (57.1)	3 (42.9)		7 (100.0)
Manager type				
Paid	8 (50.0)	8 (50.0)		16 (100.0)
Volunteer	5 (55.6)	1 (11.1)	3 (33.3)	9 (100.0)
<b>Total</b>	<b>13 (52.0)</b>	<b>9 (36.0)</b>	<b>3 (12.0)</b>	<b>25 (100.0)</b>

Table 25—**Occupations of Members**

Cooperative type	Farm type			Total (202)
	Primary occupation	Part-time	Retirement	
Fruit	43.2%	38.1%	18.7%	100% (139)
Vegetable	80.8%	11.5%	7.7%	100% (26)
Mixed	78.4%	21.6%		100% (37)
<b>Total</b>	<b>54.5% (110)</b>	<b>31.7% (64)</b>	<b>13.9% (28)</b>	<b>100.0% (202)*</b>

\* Two respondents did not indicate their farm type, making the total 202 instead of 204.



Table 26—**Demographic Characteristics of Members**

Member type	Demographic characteristics						Household income % <\$80,000	% Income from farming
	# Respondents	% of Total	Mean age (years)	% Female	% White	% College		
Retirement	28	13.9	69.25	14.3	88.9	22.2	88.4	29.25
Part-time	64	31.6	53.98	9.7	96.7	61.7	79.7	15.34
Primary occupation	110	54.5	52.36	8.6	97.2	47.6	67.6	80.58
<b>All</b>	<b>202</b>	<b>100.0</b>	<b>55.31</b>	<b>9.7</b>	<b>95.9</b>	<b>48.5</b>	<b>74.5</b>	<b>54.32</b>

Averaging about 55 years, cooperative members reported being about the same age as American farmers overall. Retirement farmers tended to be slightly more female (at 14.3 percent) than other cooperative types, although women represent less than 10 percent of the total cooperative member population. On the whole, cooperative members tended to be white, but the blueberry cooperatives of Maine did have a small Native American membership. Part-time cooperative members were the most educated, with almost 62 percent attaining at least “some college.” Less than half of primary farmers spent any time in college, and, perhaps reflecting generational differences, less than a quarter of retirees have college experience.

Member respondents for whom farming was their primary occupation reported considerably more workers (e.g., employees and laborers) than did the other types of members (Table 27). The average respondent had been a member for 17.4 years. The mean number of miles to delivery point was 38, although primary-occupation farmers traveled an average of 56.6 miles. Primary-occupation farms also had significantly greater acreage in farm crops and farm gross receipts than other cooperative members. For more member business characteristics by farm and co-op type, see (Appendix I).

### Cooperative Share of Member Farm Sales

On the whole, Northeastern cooperative members generated almost two-thirds (64.4 percent) of their farms sales through their cooperatives (Table 28). Fruit producers utilized their cooperatives for sales (77 percent) far more than vegetable (41.2 percent) and mixed cooperative members (33.2 percent). With a greater variety of products, vegetable and mixed cooperative

members utilized a more diverse array of marketing outlets and strategies, such as retailing and direct wholesaling to restaurants and small grocers.

Likewise, primary-occupation cooperative members relied significantly less on their cooperatives (54.2 percent) than did those of other farm types, and more on other marketing options.

### Members' Best Marketing Channel

Only 61 percent of respondents reported their cooperatives as their “best” marketing outlets (Table 29). Members of fruit cooperatives, retired and part-time farmers were more likely than vegetable and mixed cooperative members and primary-occupation farmers to think of their cooperatives as their “best” marketing channel.

### Cooperative Membership Contribution to Farmers and Families

To ascertain how and to what degree the cooperatives contributed to the viability of farms and farm families, we asked the members about their sales volume; the proportion of their farm sales that come from their cooperatives; how satisfied they were with the cooperative; and the degree to which their cooperative provided them a given range of benefits. We chose not to directly ask cooperative members their volume of sales through their cooperatives. Instead, we asked members to report their total farm sales and the percent of farm sales through their cooperative. We assumed that this computation would yield more financial data than if we asked for their sales directly.

Table 27—**Member Business Characteristics by Farm Type**

Typology of Northeastern cooperative members					
Farm type	Total workers (mean)	# of Years as members	Miles to cooperative delivery point	Farm crop acres	Total farm gross receipts 1998 (# of respondents)
Retirement	5.9	18.4	12.4	54.3	\$30,011 (15)
Part-time	8.8	14.1	19.6	39.4	\$25,679 (35)
Primary occupation	23.4	19.1	56.6	142.8	\$395,116 (77)
Overall Mean	16.4	17.4	38.0	98.6	\$250,180 (127)

Table 28—**Market Channel by Cooperative and Farm Type**

Market channel used						
Cooperative type	% Cooperative	% Wholesale	% Retail	% Direct wholesale	% Other	Total
Fruit	77.1	11.9	6.2	1.9	2.3	100.0
Vegetable	41.2	9.4	35.2	14.2	0.0	100.0
Mixed	33.2	28.6	26.3	6.9	4.9	100.0
Total	64.4	14.7	13.6	4.4	2.5	100.0
Farm category						
Retirement	74.7	10.8	.0	1.9	12.6	100.0
Part-time	77.8	10.6	2.4	.1	9.0	100.0
Primary occupation	54.2	16.3	6.7	4.1	18.8	100.0
Total	64.5	13.7	4.4	2.5	14.8	100.0

### Co-op Member Sales Volume

One-hundred and thirty-six of 204 responding cooperative members reported their total farm sales and percent of sales through their cooperatives (Table 30). Responding cooperative members reported an average of \$151,552 in sales through their cooperative in 1998, which is quite large compared to the average farm sales of all fruit and vegetable farmers in the Northeast. The average vegetable farm in the region generated \$49,817 in sales in 1997, while the average Northeast fruit farm generated \$68,988 in sales (esti-

mated from USDA Census of Agriculture). However, half the respondents reported sales through their cooperative at less than \$31,250. The lower median sales suggest that there were a number of respondents with relatively high sales skewing the mean.

Mixed cooperative members reported significantly lower sales through their cooperatives than either vegetable or fruit cooperative members. Respondents whose primary occupation was farming sold signifi-

Table 29—**First, Best Marketing Channel for Members by Cooperative and Farm Types**

Cooperative type	First best sales marketing outlet (% within farm category)					Total
	Cooperative	Retail	Direct wholesale	Wholesale	Other	
Fruit	79 (72.5)	13 (11.9)	5 (4.6)	7 (6.4)	5 (4.6)	109 (100.0)
Vegetable	8 (40.0)	7 (35.0)	4 (20.0)	1 (5.0)		20 (100.0)
Mixed	11 (35.5)	10 (32.3)	3 (9.7)	6 (19.4)	1 (3.2)	31 (100.0)
<b>Farm type</b>						
Retirement	13 (68.4)	5 (26.3)			1 (5.3)	19 (100.0)
Part-time	37 (69.8)	6 (11.3)	3 (5.7)	6 (11.3)	1 (1.9)	53 (100.0)
Primary occupation	47 (54.0)	19 (21.8)	9 (10.3)	8 (9.2)	4 (4.6)	87 (100.0)
<b>Total</b>	<b>98 (61.3)</b>	<b>30 (18.8)</b>	<b>12 (7.5)</b>	<b>14 (8.8)</b>	<b>6 (3.8)</b>	<b>160 (100.0)</b>

Table 30—**Mean and Median Member Sales by Cooperative Type and Occupation**

Cooperative type	Member Sales		
	Mean	Number	Median
Fruit	\$156,935	93	\$31,250
Vegetable	\$241,193	21	\$26,000
Mixed	\$52,257	24	\$10,000
<b>Total</b>	<b>\$151,552</b>	<b>138</b>	<b>\$26,241</b>
<b>Farm type</b>			
Retirement	\$14,289	17	\$8,320
Part-time	\$15,489	37	\$6,500
Primary occupation	\$244,624	82	\$62,900
<b>Total</b>	<b>\$153,494</b>	<b>136</b>	<b>\$26,241</b>

Note: The mean and median statistics for cooperatives sales were computed by multiplying the respondents' reported total gross income for 1998 by their reported percent of total sales through their cooperative.

cantly higher levels of farm products through their cooperatives than did part-time and retirement farmers.

### Member Farm Workers

An analysis of cooperative members' farm workers (Table 31) shows that an average of 2.27 full-time, year-round paid workers were supported by each

cooperative member farm. This included family and non-family employees. On average, another 14.1 paid and part-time or seasonal family and non-family workers were also supported by the typical small-scale grower cooperative member. Most of this employment, however, was generated by members whose primary occupation is farming.

## Level of Member Satisfaction with Cooperative

Cooperative members were asked about their level of satisfaction with their cooperatives. Overall, more than 80 percent were satisfied with their cooperatives. While the level of satisfaction varied somewhat across different member characteristics, analysis of variance indicated that this was not significant except with regard to the degree a member would be hurt if the cooperative closed. Table 32 provides the average level of satisfaction broken out according to member characteristics (the highest mean level of satisfaction for each category is in **bold**). The overall mean was 1.09 on a scale of -2 to 2. Among cooperative types, members of mixed cooperatives reported the highest level of satisfaction (1.24), followed by fruit cooperative members (1.13) and vegetable cooperative members (.73). However, the data indicate that the most satisfied members were those who would be affected most if their cooperative were to close (e.g., those who would be out of business (1.57) or hurt considerably (1.35), members with 1 to 10 acres (1.33), members with household income of \$60-\$79,999 (1.33) and \$80-\$99,999 (1.27), retirement farms (1.29), members with cooperative sales between \$5,000 and \$24,999 (1.26), and farms with 6 to 10 years membership (1.22)).

## Small-Scale Cooperative Benefits to Members

We asked members to rate (on a scale of 0 to 3) a variety of benefits their cooperatives provide. Table 33 presents the results by cooperative type and farm type. On the whole, “provides access to markets” (2.55) was the leading benefit, followed by “enhances farm income” (2.22). A second tier of benefits included “provides improved farm viability” (1.97) and “production information” (1.97), “maintains prospects for the next generation farm” (1.94), and “provides social support” (1.94). While “provides advantage in purchasing inputs” received the lowest rating (1.81) overall, this benefit was second only to “access to markets,” according to members of vegetable cooperatives. Conversely, the members of vegetable cooperatives did not rate “production information” benefits as highly as members of other types of cooperatives. There were no statistically significant differences in benefits between members' farm type.

Computing the mean across all benefit categories yields a “composite benefit” score for comparison across member characteristic categories (Table 34). The overall composite mean is 2.03 (the highest mean level of satisfaction for each category is in **bold**). Members who indicated the highest composite benefit from their cooperative included members who are “involved

heavily” in their cooperative (2.54); members who would be “hurt considerably” if the cooperative closed (2.42); members whose household income is \$60,000 to \$79,999 (2.48); farms with 1-to-5-year memberships (2.38); members whose sales to the cooperative are \$100,000 or more (2.33); and farms with 75 percent to 100 percent of their sales to the cooperative (2.28).

## How Members Businesses Would Be Affected if Their Co-ops Closed

In order to measure the relative importance of the co-op to their farm business, members were asked how they would be affected by the closure of their cooperative. Overall, over half (50.5 percent) would be hurt considerably or out of business if their co-op closed. A larger share of fruit co-op members would be hurt or out of business (55 percent) than either mixed (43.2 percent) or vegetable (36 percent) co-op members. Part-time and primary-occupation farms felt more vulnerable than did retirement farms and members with limited sales through their co-op.

## Cooperative Member Attitudes and Concerns

Cooperative members were asked to rate their level of agreement with a variety of attitude statements (on a scale of 0 to 2, where 0 = little or none; 1 = some; and 2 = much). Overall, the highest level of agreement was with the following statements: “cooperative tries to obtain highest returns for members” (1.74); “the cooperative treats all members equitably” (1.64); and “for a cooperative to succeed, member education is important” (1.56). The least agreement was with “cooperative benefits only the larger farms” (.16); “cooperative requires its members to invest too much equity” (.18); and “cooperative should pay higher prices to those who deliver large volume of product” (.19). There were no significant differences in attitudes by cooperative type or farm type. It should also be noted that there was support for mergers and joint ventures especially among fruit and vegetable cooperatives. However, agreement with the idea that the cooperative provides a good investment alternative to farmers with limited financial resources was less than 1 (“some”).

## Members' Issues and Concerns

We also asked cooperative members to rate “how important” various factors were, and “how much need for improvement” there was for each factor (on a scale where 0 = little or none; 1 = some; 2 = much). While reporting that many management factors are important, only the need for “higher prices” and “improved

Table 31 – Family and Non-Family Farm Workers on Member Farms

Farm type	Number of family working				Number of non-family working			
	Paid full-time	Paid part-time	Unpaid full-time	Unpaid part-time	Paid full-time	Paid part-time	Unpaid full-time	Unpaid part-time
Retirement	.38	1.31	.31	.58	.12	4.08	.00	.19
Part-time	.17	2.16	.22	.79	.11	6.40	.00	.05
Primary occupation	1.31	1.54	.48	.46	2.52	17.84	.33	.07
Total	.83	1.71	.38	.58	1.44	12.42	.18	.08

marketing strategies” were reported as being over 1 in need for improvement (i.e., between needing “some” and “much” improvement) (see Table 32, Appendix II).

## SECTION 4 Challenges and Opportunities

### Challenge Matrix

We asked managers and directors how challenging various issues were. Eleven topics were broken down into a series of questions with Likert scales (0 to 4). The scale was later collapsed to 0 to 2, with 0 = “no challenge”; 1 = “some challenge,” and 2 = “great challenge.” Composite means scores were created by averaging the questions for each topic. The results shown in Table 39 reveal that, in general, vegetable cooperatives, older cooperatives, and cooperatives with paid managers report a greater level of challenge than other cooperatives.

### Managers' and Directors' Comparative Analysis of Challenges

We asked managers and directors to rate the level of challenge to various management issues. Appendix III provides the mean responses of managers and directors, plus the mean for both, and the mathematical difference between the two means. The top challenges were “membership commitment” (1.27) and “marketing” (1.23). However, marketing was the directors' number-one concern (1.37), followed by strategic planning (1.29). While “resource access” was ranked as the least challenging (.70), it yielded the biggest difference between managers and directors (.44). Directors were nearly twice as likely to indicate it was a challenge.

For a more detailed breakdown of the comparative analysis of challenges, see Appendix I. For example, the key membership commitment challenge was “delivering consistent volume of product.”

### Potential Opportunities for the Cooperative

On a scale of 0 to 2, cooperative managers, directors, and members rated their level of interest in a group of potential business strategies for their cooperatives. Table 40 indicates that on the whole, the respondents thought “cooperatively purchasing supplies, inputs and/or services” was a potential opportunity for the cooperative. However, directors' top opportunity was “value-adding” (e.g., processing, packaging, providing product information (1.23)).

### Potential For Inter-cooperative Activities

Both managers and members ranked “agreement to jointly purchase supplies with other cooperatives” as the number one inter-cooperative opportunity (see Table 41). Over half of managers also reported interest in “annual conference,” “pooled liability insurance,” “joint education and training,” and an “informal phone network.” Members reported similar levels of interest, but half or more of members also expressed interest in “joint marketing agreements” and “legislative actions.”

### Interest in Joining a Regional Cooperative Federation

Managers, directors, and members were asked to indicate their level of interest in a “regional federation of cooperatives,” which could implement inter-cooperative activities such as those in Table 42 on page 29. Overall, about three-quarters of all respondents (75.6 percent) indicated at least qualified interest (see Table 44). Most indicated they “might be interested if time

Table 32—Level of Satisfaction with Cooperative by Various Member Categories

	Level of satisfaction	
	Count	Mean*
<b>Cooperative type</b>		
Fruit	141	1.13
Vegetable	26	.7
Mixed	37	<b>1.24</b>
<b>Farm type</b>		
Retirement	28	<b>1.29</b>
Part-time	64	1.16
Primary Occupation	110	1.01
<b>Acreage category</b>		
1 to 10 acres	41	<b>1.33</b>
11 to 50 acres	70	1.14
51 to 100 acres	36	.94
101 and more acres	54	.94
<b>Farm year category</b>		
1 to 5 years	13	1.08
6 to 10 years	16	1.13
11 to 25 years	44	.98
26 to 50 years	64	<b>1.17</b>
51 to 75 years	37	1.08
76 or more years	27	1.07
<b>Number of years as member category</b>		
1 to 5 years	48	1.19
6 to 10 years	36	<b>1.22</b>
11 to 25 years	52	1.08
26+ years	50	.96
<b>Cooperative sales category</b>		
0 to \$4,999	36	.77
\$5,000 to \$24,999	27	<b>1.26</b>
\$25,000 to 99,999	41	1.20
\$100,000 and above	34	.91
<b>Gross 1998 household income</b>		
Less than \$20,000	17	1.18
\$20,000 to \$39,999	53	1.11
\$40,000 to \$59,999	44	1.18
\$60,000 to \$79,999	27	<b>1.33</b>
\$80,000 to \$99,999	14	1.29
\$100,000 and above	34	.76
<b>How would business be affected if co-op closed</b>		
Out of business	7	<b>1.57</b>
Hurt considerably	94	1.35
Hurt some	52	1.10
Minor effect	34	.68
No effect	13	.23

\*Level of satisfaction was ranked on a scale of -2 to 2, with -2 meaning "Very dissatisfied;" -1 = "Dissatisfied," 0 = "Not sure," 1 = "Satisfied" and 2 = "Very satisfied." The closer to the number 2.00, the higher the level of satisfaction.

and money costs were not great" (63 percent).

Cooperative directors reported the strongest interest in participating in a federation.

## Summary and Discussion

### Cooperative Structure and Organizational Challenges

The results of our surveys of directors, managers, and members of 25 small-scale fruit and vegetable cooperatives in the Northeast United States show that these businesses vary greatly in organizational structure: ranging from simple, one-crop, volunteer-managed fruit cooperative marketing pools, to professionally managed cooperatives with several hundred members and 250 types of products. The cooperatives in this sample averaged 47 members, 2 full-time year-round employees, and \$1.77 million in sales. Financial and organizational instability appear to trouble new and old, and small and large cooperatives, alike. However, the oldest cooperatives (50 or more years) report some of the greatest difficulty. Despite feeling generally positive about their experience, 88 percent of managers in this study reported seeing themselves as having "poor" or "uncertain" futures with their cooperatives, and 36 percent (including mostly paid managers) were planning to leave their positions.

### Cooperative Competitiveness and Stability

Many small-scale fruit and vegetable cooperatives perceive their strength as marketing "quality" products. However, these cooperatives appear on the whole unprepared for the competitive and ever-changing business environment, and some are not likely to survive the next 10 years. Less than half of the cooperatives reported having a growing market share, and 41 percent reported declining or unstable sales. Despite highly educated and experienced managers, a surprising number of cooperatives in the sample neither set goals nor measured operational performance. Very few cooperatives prepared feasibility studies and business plans at the start-up of their cooperatives. Furthermore, despite three-quarters reporting having some type of growth strategy (including downsizing); only about one-quarter have formal strategic plans. Membership commitment (e.g., delivering consistent volume and quality) was ranked as managers' and directors' number one challenge.

Table 33—**Benefits to Members by Cooperative Type**

Cooperative type	Member benefit category*						
	Provides access to markets	Enhances farm incomes	Provides improved farm viability	Production information	Maintains prospects for next-generation farm	Provides social support	Provides advantage in purchasing inputs
Fruit	2.43	2.21	2.00	2.14	1.95	1.91	1.66
Vegetable	2.76	2.17	1.88	1.12	2.21	2.08	2.67
Mixed	2.73	2.30	1.95	1.92	1.69	1.95	1.69
<b>Farm type</b>							
Retirement	2.29	2.08	1.96	2.23	2.13	2.19	2.17
Part-time	2.39	2.21	1.81	2.00	1.72	1.92	1.78
Primary Occupation	2.70	2.27	2.07	1.90	2.02	1.90	1.75
<b>Total</b>	<b>2.55</b>	<b>2.22</b>	<b>1.97</b>	<b>1.97</b>	<b>1.94</b>	<b>1.94</b>	<b>1.81</b>

\* Benefits conferred were ranked on a scale where 0 = none; 1 = a little; 2 = some; and 3 = much.

### Contribution of Cooperative to Family Farmers

Farming is the primary occupation of more than half (54.5 percent) of the cooperative members. On average, members generated almost two-thirds (64.4 percent) of their farm sales from their cooperative. Over 60 percent chose their cooperative as their best marketing outlet. Member mean sales through the small-scale fruit and vegetable cooperatives in the region were \$151,551.98 (median = \$26,000). Overall, members reported a high level of satisfaction with their cooperatives, although members of vegetable cooperatives were less satisfied than were members of fruit and mixed product cooperatives. Members reported that the leading benefits provided by their cooperatives were access to markets and enhanced farm income. Members generally believe their cooperatives try to obtain highest returns and treat all members equitably. Very few believed that their cooperatives benefited only larger farms. However, in general, members also reported that they wanted to see higher prices and improved marketing activity. But they also believe that for cooperatives to succeed, member education is important. Members of vegetable cooperatives in particular believed that their managers and board members needed improvement. Most members believe their cooperative membership provides improved farm viability and maintains prospects for

the next generation on the farm to “some” degree. Nearly half (47 percent) reported that they would be “hurt considerably” if their cooperative closed, and nearly three-quarters claimed they would be hurt “at least some.”

### Opportunities for Collaboration

Most small-scale cooperative managers, members, and directors in the study were interested in forming a regional federation, especially if the time and cost were not too great. Cooperatives were particularly interested in shared purchasing of inputs, an annual conference, regionally pooled liability insurance, joint marketing, and joint education.

### Conclusions and Recommendations

This descriptive analysis of small-scale cooperative managers, directors, and members in the Northeast corroborates previous studies, which highlight the importance of small-scale cooperatives in improving the livelihoods of family farmers. We did not explore how members would cope if their cooperatives closed or did not exist, but clearly the above data suggest that small-scale grower cooperatives on the whole play a critical role in the sustainability of their family farm members' businesses and in the welfare of their families.

Table 34—Composite Benefit Score by Member Category

	Benefit Score	
	Count	Mean Score
<b>Cooperative type</b>		
Fruit	141	2.02
Vegetable	26	<b>2.14</b>
Mixed	37	1.97
<b>Farm type</b>		
Retirement	28	<b>2.18</b>
Part-time	64	1.90
Primary occupation	110	2.07
<b>Acreage</b>		
1 to 10 acres	41	<b>2.20</b>
11 to 50 acres	70	2.13
51 to 100 acres	36	1.79
101+ acres	54	1.91
<b>Number of years as member</b>		
1 to 5 years	48	<b>2.38</b>
6 to 10 years	36	2.05
11 to 25 years	52	1.96
26+ years	50	1.82
<b>Percent sales to cooperative</b>		
No sales to cooperative	18	1.32
1 to 24%	31	1.65
25 to 49%	22	1.86
50 to 74%	21	2.04
75 to 100%	112	<b>2.28</b>
<b>Cooperative sales</b>		
0 to \$4,999	36	1.54
\$5,000 to \$24,999	27	2.17
\$25,000 to 99,999	41	1.94
\$100,000+	34	<b>2.33</b>
<b>Gross 1998 household income</b>		
Less than \$20,000	17	1.89
\$20,000-\$39,999	53	1.94
\$40,000-\$59,999	44	2.15
\$60,000-\$79,999	27	<b>2.48</b>
\$80,000-\$99,999	14	2.17
\$100,000 plus	34	1.76
<b>Farm sales to cooperative</b>		
Above average	43	2.22
About average	71	<b>2.23</b>
Below average	70	1.75
<b>Effect on business if cooperative closed</b>		
Out of business	7	1.90
Hurt considerably	94	<b>2.42</b>
Hurt some	52	2.01
Minor effect	34	1.35
No effect	13	1.21
<b>Current level of participation in cooperative</b>		
Involved very little	79	1.57
Involved moderately	80	2.19
Involved heavily	42	<b>2.54</b>



Table 35—How Farm Business Would Be Affected if Co-op Closed, by Co-op Type, Farm Category and Percent of Sales to Co-op

	How farm business would be affected if co-op closed					Total
	Out of business	Hurt considerably	Hurt some	Minor effect	No effect	
Co-op type						
Fruit	5 (3.6%)	71 (51.4%)	35 (25.4%)	21 (15.2%)	6 (4.3%)	138 (100%)
Vegetable	0 (0%)	9 (36.0%)	6 (24.0%)	6 (24.0%)	4 (16.0%)	25 (100%)
Mixed	2 (5.4%)	14 (37.8%)	11 (29.7%)	7 (18.9%)	3 (8.1%)	37 (100%)
Total	7 (3.5%)	94 (47.0%)	52 (26.0%)	34 (17.0%)	13 (6.5%)	200 (100%)
Farm type						
Retirement	1 (3.6%)	11 (39.3%)	9 (32.1%)	6 (21.4%)	1 (3.6%)	28 (100%)
Part-time	3 (4.8%)	31 (50.0%)	14 (22.6%)	10 (16.1%)	4 (6.5%)	62 (100%)
Primary Occupation	3 (2.8%)	51 (46.8%)	29 (26.6%)	18 (16.5%)	8 (7.3%)	109 (100%)

Table 36—Member Attitudes and Concerns by Cooperative Type

Member attitudes and concerns (scale 0 to 2)	Cooperative type			Total
	Fruit	Vegetable	Mixed	
Cooperative tries to obtain highest returns for members	1.81	1.59	1.53	1.73
The cooperative treats all members equitably	1.69	1.52	1.51	1.64
For cooperative to succeed, member education is important	1.60	1.57	1.42	1.56
Cooperative management is responsive to member concerns and suggestions	1.51	1.45	1.66	1.53
Directors listen to member concerns and act in best interests of members	1.50	1.62	1.6	1.53
Members of cooperative have good working relationships with each other	1.50	1.64	1.57	1.53
Members of cooperative fulfill responsibilities conscientiously	1.49	1.33	1.5	1.48
Cooperative has worked to increase volume utilization for my commodities	1.46	1.39	1.31	1.43
I patronize cooperative out of loyalty	1.30	1.24	1.24	1.28
Cooperative should pay higher prices to those who deliver better quality product	1.22	1.52	1.29	1.27
To stay competitive, cooperative may need to examine mergers or joint ventures	1.10	1.10	0.69	1.03
Cooperative provides good investment alternative to farmers with limited financial resources	0.81	0.52	0.69	0.75
I patronize cooperative only if prices are better than other firms	0.42	0.42	0.61	0.45
Cooperative should pay higher prices to those who deliver large volume of product	0.10	0.73	0.22	0.19
Cooperative requires its members to invest too much equity	0.19	0.14	0.17	0.18
Cooperative benefits only the larger farms	0.10	0.50	0.17	0.16

Table 37—Member Attitudes and Concerns by Farm Type

	Farm type			Total
	Retire- ment	Part-time	Primary Occupation	
	(scale 0 to 2)			
Cooperative tries to obtain highest returns for members	1.88	1.78	1.67	1.73
The cooperative treats all members equitably	1.72	1.57	1.65	1.64
For cooperative to succeed, member education is important	1.73	1.53	1.53	1.56
Cooperative management is responsive to member concerns and suggestions	1.69	1.47	1.51	1.53
Cooperative has worked to increase volume utilization for my commodities	1.56	1.45	1.37	1.42
I patronize cooperative out of loyalty	1.26	1.11	1.37	1.28
Cooperative should pay higher prices to those who deliver better quality product	0.85	1.25	1.38	1.26
To stay competitive, cooperative may need to examine mergers or joint ventures	1.12	1.03	1.00	1.03
Cooperative provides good investment alternative to farmers with limited financial resources	0.96	0.90	0.63	0.76
I patronize cooperative only if prices are better than other firms	0.48	0.41	0.48	0.46
Cooperative should pay higher prices to those who deliver large volume of product	0.12	0.14	0.25	0.19
Cooperative benefits only the larger farms	0.08	0.15	0.18	0.16
Directors listen to member concerns and act in best interests of members	1.65	1.48	1.52	1.53
Cooperative requires its members to invest too much equity	0.08	0.22	0.18	0.18
Members of cooperative fulfill responsibilities conscientiously	1.54	1.47	1.46	1.47
Members of cooperative have good working relationships with each other	1.62	1.51	1.52	1.53

However, despite the need for and growth of small-scale cooperatives since the 1980s, this class of fruit and vegetable cooperatives is comprised of many organizationally fragile and strategically vulnerable businesses, and a number of them are not likely to survive without some fundamental changes in organization and operation. Like other recent studies, the results point to lack of member commitment, leadership deficiencies, and poor business planning as the leading barriers to meeting small-scale cooperative growth goals. These issues must be aggressively and satisfactorily addressed for the recent growth of small-scale fruit and vegetable cooperatives to continue.

Similar to Bhuyan et al, (2001), we found that management and members of small-scale grower cooperatives had astute observations about each other. Indeed, the significant polarity of their views on some issues is quite telling. Management generally sees the need for members to improve quality and volume of their products, while members perceive that their managers need to be more effective sellers. Therein lies the fulcrum of tension upon which the viability of a cooperative rests. The vulnerability of small-scale grower cooperatives might be measured by how out of

balance the two strategic interests of management and growers are. Should managers become more effective marketers, and sales and profitability increase, members might become more loyal and consistent suppliers of quality products. Likewise, should members improve the quality and volume of their products, managers might have increased opportunities to find markets and increase sales. This is not a chicken-and-egg question of which comes first—obviously, small-scale cooperatives must work on these objectives simultaneously and continually. Managers need to develop better marketing and financial management skills, and members need to increase quality and volume. How best to implement these strategic improvements becomes the key question.

Of course, small-scale grower cooperatives must look for direct technical assistance from traditional sources of information and education such as Land Grants, cooperative consultants, government agencies, and publications. However, learning from each other may simply be the best educational method of all. It was for this reason that we explored the concept of a federation of small-scale fruit and vegetable cooperatives.

Table 38—Issues and Concerns of Members by Farm Type

Farm type	How important (0 to 2)*	Factor	How much need for improvement (0 to 2)*	Farm type
Retirement	1.83	Higher prices	1.13	Retirement
Part-time	1.92		1.25	Part-time
Primary occupation	1.92		1.29	Primary occupation
<b>Total</b>	1.91		1.26	<b>Total</b>
Retirement	1.14	Improved marketing strategies	.76	Retirement
Part-time	1.46		1.02	Part-time
Primary occupation	1.56		1.17	Primary occupation
<b>Total</b>	1.48		1.07	<b>Total</b>
Retirement	.95	Better leadership and management skills for cooperative manager	.46	Retirement
Part-time	1.27		.63	Part-time
Primary occupation	1.39		.75	Primary occupation
<b>Total</b>	1.30		.67	<b>Total</b>
Retirement	1.00	Better use of information technology	.52	Retirement
Part-time	1.31		.98	Part-time
Primary occupation	1.30		.89	Primary occupation
<b>Total</b>	1.27		.87	<b>Total</b>
Retirement	1.00	Better leadership and management skills for cooperative board	.62	Retirement
Part-time	1.36		.72	Part-time
Primary occupation	1.26		.74	Primary occupation
<b>Total</b>	1.26		.72	<b>Total</b>
Retirement	.86	More voice in cooperative decisions	.28	Retirement
Part-time	1.18		.51	Part-time
Primary occupation	1.13		.50	Primary occupation
<b>Total</b>	1.11		.47	<b>Total</b>
Retirement	1.19	More opportunities through the cooperative	.83	Retirement
Part-time	1.17		.89	Part-time
Primary occupation	1.05		.72	Primary occupation
<b>Total</b>	1.10		.79	<b>Total</b>
Retirement	.71	More encouragement from cooperative to innovate	.68	Retirement
Part-time	.95		.64	Part-time
Primary occupation	1.04		.78	Primary occupation
<b>Total</b>	.97		.72	<b>Total</b>
Retirement	.77	More services for members	.65	Retirement
Part-time	1.14		.86	Part-time
Primary occupation	.88		.63	Primary occupation
<b>Total</b>	.95		.71	<b>Total</b>
Retirement	.87	Better payment options	.35	Retirement
Part-time	.96		.42	Part-time
Primary occupation	.92		.58	Primary occupation
<b>Total</b>	.93		.50	<b>Total</b>
Retirement	.61	More dependable distribution of patronage refunds	.32	Retirement
Part-time	.65		.43	Part-time
Primary occupation	.78		.34	Primary occupation
<b>Total</b>	.72		.36	<b>Total</b>
Retirement	.40	Greater dividend payments	.25	Retirement
Part-time	.79		.55	Part-time
Primary occupation	.71		.47	Primary occupation
<b>Total</b>	.70		.47	<b>Total</b>

\* Responses were ranked on a scale where 0 = a little or none; 1 = some; 2 = much.

Table 39—Cooperative Challenges by [multiple categories] Composite Scores for Each Topic

	Cooperative challenge										
	Member commit- ment	Shared vision	Marketing	Strategic planning	Effective board	Financial manage- ment	Effective Qualified manage- ment	Manage- ment teams	Informa- tion flow	Transpor- tation issues	Resource access
Respondent type											
Manager	1.26	1.10	1.09	.93	.90	.84	.83	.77	.75	.66	.48
Director	1.28	1.07	1.37	1.29	1.08	<b>1.20</b>	1.11	.88	1.03	.89	<b>.92</b>
Cooperative type											
Fruit	1.23	.93	.77	.83	.79	.73	.67	.75	.64	.50	.39
Vegetable	1.38	<b>1.55</b>	<b>1.70</b>	1.17	1.03	1.00	1.19	1.04	<b>1.25</b>	<b>1.06</b>	.71
Mixed	1.25	1.20	1.37	1.00	1.03	.96	.93	.64	.67	.75	.52
Cooperative age											
1 to 9 years	1.18	.88	.90	.77	.89	.78	.52	.70	.63	.65	.28
10 to 49 years	1.19	1.05	1.12	.62	.69	.75	.91	.52	.73	.84	.44
50+ years	<b>1.46</b>	1.49	1.31	<b>1.52</b>	<b>1.13</b>	1.04	1.16	<b>1.14</b>	.93	.46	.81
Sales (1998)											
Up to \$499K	1.17	1.03	1.03	.81	.74	.81	.53	.56	.75	.88	.28
\$500K+	1.35	1.17	1.14	1.05	1.04	.87	1.10	.96	.75	.46	.67
Manager type											
Paid	1.36	1.34	1.28	1.19	<b>1.13</b>	1.02	<b>1.24</b>	1.03	.84	.62	.66
Volunteer	1.08	.69	.76	.48	.47	.53	.10	.31	.59	.72	.17
Number of members											
1 to 24	1.20	.97	1.04	.69	.82	.77	.67	.62	.74	.77	.38
25 or more	1.34	1.27	1.15	1.24	.99	.93	1.02	.95	.77	.52	.61
Cooperative is achieving goals											
Yes	1.17	.92	1.02	.77	.78	.58	.71	.64	.60	.55	.45
Total	1.26	1.10	1.09	.93	.90	.84	.83	.77	.75	.66	.48

Note: The highest composite scores for each challenge category are in boxes.

Table 40—Potential Business or Service Opportunities for the Cooperative

Level of interest cooperative has in...*	Respondent type			
	Manager	Director	Membe	All
Cooperatively purchasing supplies, inputs and/or services	1.17	1.17	1.19	1.19
Value adding	1.09	1.23	0.98	1.00
Retail sales	0.55	1.00	0.82	0.80
Exporting	0.74	0.54	0.77	0.75
Workshops for members/management	0.59	0.62	0.74	0.72
Member loans	0.23	0.54	0.34	0.34

\* Responses were ranked on a scale where 0 = little or no interest; 1 = some interest; 2 = much interest.

Table 41—**Potential for Inter-Cooperative Collaboration by Manager and Member Response**  
(Ranked in high to low in order of management response)

Manager (% within respondent type)	Inter-cooperative opportunity to participate in	Member (% within respondent type)
18 (72.0)	Agreements to jointly purchase supplies with other cooperatives	151 (74.8)
18 (72.0)	Annual conferences for small-scale grower cooperatives in region	117 (57.9)
17 (68.0)	Regionally pooled liability insurance for cooperative staff, managers and members	115 (56.9)
15 (60.0)	Joint education and training for managers and members	129 (63.9)
14 (56.0)	Informal phone network of managers	81 (40.1)
12 (48.0)	Agreements with other cooperatives to jointly market products	128 (63.4)
12 (48.0)	Supporting development of new cooperatives in the Northeast	62 (30.7)
11 (44.0)	Coordinated boycotting activities or poor credit lists	70 (34.7)
11 (44.0)	Joint legislative actions	101 (50.0)
10 (40.0)	Development fund with revolving lines of credit for cooperative and/or members	69 (34.2)

Table 42—**Interest in Joining a Cooperative Federation by Respondent Type**

Interest in joining cooperative federation	Respondent type (% within respondent type)			Total
	Manager	Director	Member	
Definitely not interested	4.3	0.0	7.0	6.3
Probably not interested	17.4	7.1	18.9	18.1
Might be interested if time and costs were not great	56.5	64.3	63.7	63.0
Definitely interested	21.7	28.6	10.4	12.6
Total	100.0	100.0	100.0	100.0

### Recommendations to Northeastern Fruit and Vegetable Cooperatives

1. Invest in management training, especially in the “hard” skills areas of marketing, accounting, information management, and member recruitment and member relations.
2. Improve utilization of existing technical assistance resources to improve strategic planning, including financial performance benchmarking and evaluation; increase contact with state-based USDA cooperative development specialists and increase participation in existing cooperative development organizations in the region such as the Cooperative Development Institute (CDI) and Keystone Development Center (KDC), and Cooperation Works!, a national network of coop-

erative development organizations of which CDI and KDC are a part. Additional educational and organizational support may come from the Northeast Cooperative Council (NECC), and the Mid-Atlantic Alliance of Cooperatives. CDI is developing networking tools including an interactive cooperative directory for sourcing products, and an “on-line community network” that could potentially link cooperative managers and facilitate peer-to-peer education and information sharing.

3. Consider inter-cooperative activities such as joint ventures in value-adding, coordinated off-season sales, and coordinated input purchases, which can potentially improve efficiency and profitability.

4. Work to strengthen relationships with core members, especially those members whose primary occupation is farming.
5. Improve social relationships among managers, members and directors through organizational development training/team building workshops. Consider organizing post-harvest member family activities to reinforce the social bonds between members, directors, management and outside supporters.
6. Make more concerted efforts to improve the salaries and benefits of managers. Improve recruitment strategies, provide sales incentives, and evaluate all cooperative personnel annually. Consider creating a package of benefits and incentives for volunteer managers, even modest ones which are simply more demonstratively supportive and appreciative.
7. Actively improve member education. Consider at least biannual third party (outside) training for new and long-time members to remind them of their responsibilities and commitments.
8. Consider strategies that simultaneously increase prices paid to members and improve cooperative efficiency, such as paying product quality differentials.
9. Invest in upgrading accounting and information technology which improves efficiency and communication.
10. Take advantage of opportunities to engage with other marketing cooperatives, regardless of scale or product.
5. Fund or otherwise support existing private sector efforts to develop unique cooperative accounting and information management systems.
6. Support cross-sectoral and inter-regional management mentoring and exchange programs.
7. Support/facilitate manager and director tours of small-scale fruit and vegetable cooperatives in other countries (especially in Canada and Europe).
8. Reinstate the Cooperative Directors Institute formerly at Pennsylvania State University, which was discontinued in 2002.
9. Maintain support for state-based USDA cooperative development specialists with mandates for balancing assistance to new and existing cooperatives, and for increasing technical assistance in the areas of strategic planning, accounting, marketing, and member relations.
10. Continue and expand cooperative development training programs through Cooperation Works! to enable "agriculture development specialists" (NY), and Cooperative Extension field staff to serve the needs of small cooperatives.
11. Consider strategies for improving the "image" of small-scale fruit and vegetable marketing cooperatives among farmers. Increase visibility of small-scale fruit and vegetable cooperatives in USDA publications and in the agriculture and popular press.
12. Build the capacity of Marketing our Cooperative Advantage (MOCA) in developing marketing campaigns (both national and regional) to win consumer approval of cooperatives through an emphasis on supporting family farms.
13. Consider establishing a national group, or a subgroup of an existing national organization, which can support small-scale cooperatives. There are perhaps hundreds of incorporated and non-incorporated agricultural production business entities that would qualify as small-scale cooperatives. A national organization would have the scale and resources to be more viable than the type of smaller regional organization examined in this study.

### **Public Policy Recommendations**

1. Develop a national financial benchmarking initiative for small-scale fruit and vegetable cooperatives to help guide strategic management decisions.
2. Encourage business-to-business activities such as strategic alliances between cooperatives in different climatic regions; fund pilot projects and case studies of successful inter-cooperative activities.
3. Encourage inter-cooperative input purchases (via collaborating with supply cooperatives) to bring individual cooperative operating costs down.
4. Provide programs for business management training of managers, especially in the area of marketing, accounting, member relations and recruitment, and information management technology. Support training for using such systems.

### **Suggestions for Further Research**

1. Conduct more detailed study of the social and economic impacts of cooperatives on communities where members are concentrated.
2. Develop risk management decision-making tools to assist farmers in determining if cooperative membership is in their families' best interest.

3. Explore the feasibility of a national or international small-scale cooperative federation.
4. Given that a number of cooperatives included in the original sample have ceased business operations, it would be useful to study why those cooperatives went out of business or terminated operations.

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Appendix I—Types of Northeastern Cooperative Members

Cooperative type	Farm category	Total employees (mean)	# of years as member	Miles to cooperative delivery point	Farm crop acres	Total farm gross receipts 1998 (# of respondents)	Percent farm sales to cooperative	Percent Income from farming
Fruit	Retirement	6.2	16.9	10.8	48.2	\$27,154 (14)	0.7	27.4
	Part-time	9.5	15.3	12.4	29.0	\$26,030 (29)	87.3	15.4
	Primary occupation	29.9	19.9	66.6	183.7	\$410,805 (45)	67.3	78.9
	Total	17.9	17.6	34.7	100.4	\$222,969 (88)	77.5	46.5
Vegetable	Retirement	2.0	35.5	32.5	132.5	\$70,000 (1)	.0	50.0
	Part-time	1.3	21.5	94.3	191.7	\$8,000 (1)	3.3	24.5
	Primary occupation	18.4	27.2	58.4	114.9	\$520,714 (14)	51.0	90.1
	Total	15.2	27.4	60.9	125.2	\$460,500 (16)	41.2	81.6
Mixed	Part-time	7.1	1.5	38.5	49.7	\$27,180 (5)	44.3	12.3
	Primary occupation	13.6	10.5	35.8	78.4	\$258,205 (18)	30.2	76.9
	Total	12.2	8.7	36.4	72.8	\$207,982 (23)	33.2	63.6
Total	Retirement	5.9	18.4	12.4	54.3	\$30,011 (15)	74.7	29.3
	Part-time	8.8	14.1	19.6	39.4	\$25,679 (35)	77.8	15.3
	Primary occupation	23.4	19.1	56.6	142.8	\$395,116 (77)	54.2	80.6
	Total	16.4	17.4	38.0	98.6	\$250,180 (127)	64.5	54.3

Appendix II—Issues and Concerns of Members by Cooperative Type

Cooperative type	How important (0 to 2)*	Factor	How much need for improvement (0 to 2)*	Cooperative type
Fruit	1.91	Higher prices	1.27	Fruit
Vegetable	1.92		1.14	Vegetable
Mixed	1.92		1.25	Mixed
Total	1.91		1.25	Total
Fruit	.61	Better payment options	.61	Fruit
Vegetable	.33		.33	Vegetable
Mixed	.19		.19	Mixed
Total	.50		.50	Total
Fruit	.46	Greater dividend payments	.46	Fruit
Vegetable	.65		.65	Vegetable
Mixed	.43		.43	Mixed
Total	.47		.47	Total
Fruit	.36	More dependable distribution of patronage refunds	.36	Fruit
Vegetable	.52		.52	Vegetable
Mixed	.27		.27	Mixed
Total	.36		.36	Total

continued



Appendix II—Issues and Concerns of Members by Cooperative Type (Continued)

Cooperative type	How important (0 to 2)*	Factor	How much need for improvement (0 to 2)*	Cooperative type
Fruit	.96	More encouragement from cooperative to innovate	.73	Fruit
Vegetable	1.05		.95	Vegetable
Mixed	1.00		.59	Mixed
Total	.98		.72	Total
Fruit	1.50	Improved marketing strategies	1.09	Fruit
Vegetable	1.63		1.25	Vegetable
Mixed	1.34		.89	Mixed
Total	1.48		1.07	Total
Fruit	1.29	Better use of information technology	.89	Fruit
Vegetable	1.42		1.16	Vegetable
Mixed	1.11		.64	Mixed
Total	1.27		.87	Total
Fruit	1.13	More voice in cooperative decisions	.52	Fruit
Vegetable	1.20		.37	Vegetable
Mixed	1.00		.36	Mixed
Total	1.12		.47	Total
Fruit	.94	More services for members	.71	Fruit
Vegetable	1.04		.95	Vegetable
Mixed	.94		.56	Mixed
Total	.95		.70	Total
Fruit	1.11	More opportunities through the cooperative	.79	Fruit
Vegetable	1.35		.90	Vegetable
Mixed	.94		.71	Mixed
Total	1.10		.78	Total
Fruit	1.28	Better leadership and management skills for cooperative board	.73	Fruit
Vegetable	1.57		1.11	Vegetable
Mixed	1.03		.44	Mixed
Total	1.26		.71	Total
Fruit	1.23	Better leadership and management skills for cooperative manager	.63	Fruit
Vegetable	1.70		1.21	Vegetable
Mixed	1.31		.53	Mixed
Total	1.30		.67	Total

	Respondent type			
	Manager	Director	Member	All
<b>Membership Commitment Challenges</b>				
Delivering consistent volume of product	1.52	1.47	1.36	1.38
Delivering consistent product quality	1.60	1.6	1.43	1.46
Providing sufficient capital investment	1.08	1.21	1.04	1.05
Pool of willing and qualified directors	0.84	0.86		0.85
<b>Marketing Challenges</b>				
Becoming supplier of choice to key customers	1.32	1.71	1.29	1.32
Effective promotion and advertising	0.64	1.38	1.09	1.06
Efficient distribution	1.16	1.14		1.15
Providing customer services	1.00	1.00		1.00
Maintaining product quality	1.32	1.53		1.40
<b>Effective Information Flow Challenges</b>				
Adequate computer software and hardware	0.63	0.86		0.71
Member communication	1.00	1.27	1.19	1.17
Board communication	0.75	0.79		0.76
Record keeping	0.79	0.86		0.82
Customer data analysis	0.39	0.86		0.57
Customer communication	0.92	1.27		1.05
<b>Resource Access Challenges</b>				
Access to educational organizations	0.36	0.69	0.69	0.65
Access to cooperative development expertise	0.6	1.08		0.76
Access to legal assistance	0.6	0.71		0.64
Access to accounting assistance	0.56	0.71		0.62
Access to consulting assistance	0.46	1.00		0.66
Access to land grant university/Extension	0.21	0.62		0.35
<b>Strategic Planning Challenges</b>				
Clear mission and vision	0.88	1.07	1.10	1.08
Existence of up-to-date, working strategic plan	1.04	1.21		1.10
Testing financial and operational performance regularly	0.88	1.57		1.13
<b>Shared Vision Challenges</b>				
Ability to arrive at a shared vision among members	1.28	1.15		1.24
Vision understood across membership	1.28	0.85		1.13
Board providing adequate leadership	1.08	1.07		1.08
Management operating within shared vision	0.67	0.93		0.76
Balancing grower needs and management needs	1.16	0.92	1.04	1.05
<b>Challenges to Hiring and Retaining Qualified Management</b>				
Clear position description	0.75	1.08		0.86
Competitive wage and benefits package	1	1.14	0.88	0.91
Existence of succession plan	0.96	1.14		1.03
Effective annual evaluation	0.72	0.92		0.79
Good relations with board	0.48	0.71		0.56
Retaining qualified management	0.96	1.00	1.20	1.17
Avoiding management burn-out	0.83	1.15		0.95
<b>Challenges to a Highly Effective Board</b>				
Motivating board	1.08	0.93		1.03
Director nomination process in place	0.52	0.77		0.61
Flexibility and creativity	0.88	0.69		0.82
Succession plan for leaders	1.12	1.15		1.13
Evaluating performance of itself, manager and cooperative	1.21	0.93		1.11

continued

Appendix III—**Comparative Analysis of Challenges by Respondent Type** (Continued)

	Respondent type			All
	Manager	Director	Member	
	0.83	1.15		0.95
Using meeting time effectively	1.00	1.36		1.13
Effectively delegating authority	0.92	1.21		1.03
Ability to make corrections in policy	0.68	0.77		0.71
Sufficient trust between members and management	0.64	1.07	0.99	0.95
<b>Challenges to Developing Effective Teams</b>				
Effective board and management team	0.80	0.77	1.07	1.03
Effective management and staff relationships	0.50	1.00		0.68
Unified membership	1.04	0.93		1.00
Existence of teams of advisors	0.58	0.64		0.61
<b>Transportation Challenges</b>				
Assembling products from member farms	0.60	0.86		0.69
Distributing products to customers	1.04	1.14	1.07	1.07
Tracking whether loads are profitable	0.22	1.00		0.50
Developing alliances and coordination with other distributors	0.75	0.69		0.73
<b>Financial Management Challenges</b>				
Achieving profitability	1.24	1.43	1.40	1.38
Access to loans	0.52	1.07		0.72
Equity financing	0.64	1.00		0.77
Managing operating expenses	0.92	1.29		1.05

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## U.S. Department of Agriculture

### Rural Business–Cooperative Service

Stop 3250

Washington, D.C. 20250-3250

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The cooperative segment of RBS (1) helps farmers and other rural residents develop cooperatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs. RBS also publishes research and educational materials and issues *Rural Cooperatives* magazine.

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