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FARMING ALTERNATIVES:
EXPERIENCE IN NEW YORK STATE

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ABSTRACT

A survey of farmers with alternative enterprises was conducted in 1986. One hundred sixty seven usable surveys were returned by farmers producing commodities atypical of the region, using production methods atypical of the region, adding value to a raw commodity, providing a farm based service or incorporating a direct to consumer marketing function.

Results of the survey indicate that most farms with alternative enterprises were around the major metropolitan areas of the state and in the Finger Lakes Region. The managers of these farms averaged three years of post high school education and 15 percent were women. Alternative enterprises were dominant on many of the farms and financial stress was not an impetus for starting the enterprise. Direct marketing was the most prevalent type used by the farmers.

Sixty percent of the alternative enterprises were profitable while 13 percent broke even and 27 percent were unprofitable. Farming alternatives are just as risky as other farming enterprises and are not a guarantee of an increase in farm profitability.

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1.00 INTRODUCTION

Although the agricultural community is promoting agricultural alternatives, basic economic facts about agricultural alternatives are not that well known. Without this type of information, support programs for farming alternatives may be ineffectual. Furthermore, without this basic information, unprofitable alternative enterprises may be promoted unwittingly. Therefore, economic data on alternative farm enterprises should be collected and analyzed.

Some fundamental information that can help establish beneficial cooperative extension programs and appropriately targeted governmental programs, as well as, suggest future research needs are presented in this report. This information is:

1. The types of alternative enterprises in New York State.
2. The characteristics of farmers who manage nontraditional operations.
3. The particulars about the farms which have alternative enterprises on them.
4. The attributes of the alternative enterprises.
5. The development process of the alternative enterprise.
6. The profitability of alternative enterprises in New York State.

1.10 FARMING ALTERNATIVES DEFINED

Several researchers have defined agricultural alternatives in slightly different ways. Three are:

> The alternatives label has connoted a broader context than [farm] diversification, implying not only examination of nontraditional crops but also experimentation with new or alternative types and systems of agriculture ranging from organic production techniques to more intense production and marketing procedures (Estest and Ingram).

"Alternative". . . [is] defined as any agriculturally based activity not traditionally considered as a predominant activity. It is important to distinguish "alternative" in this sense from alternative farming systems (organic, natural, etc.) although they certainly may be a limited subset of the alternative opportunities available (Goodwin).

We use the term *alternative agriculture* to refer to adoption of production methods designed to use fewer purchased inputs, selection of unconventional farm enterprises, and diversification of enterprises and uses of family resources, including combining agricultural and non-agricultural enterprises under the same ownership or management (Babb and Long).

These past definitions of farming alternatives lack some concreteness and imply that the alternative should be new to the farm. Babb and Long are the only researchers who specifically include non-agricultural activities as an alternative enterprise.

For this study, New York State agricultural alternatives are also defined somewhat vaguely. Two differences between this definition and past ones are: (1) the alternative enterprise is not required to have been recently adopted, and (2) an agricultural production requirement is not imposed on the definition of an alternative enterprise.

For this study, alternative enterprises are defined by attributes associated with nontraditional agriculture. Characteristics used to identify alternative enterprises are: the commodity produced is atypical for the region, the production methods applied are atypical for the region, additional value is added to a raw commodity, the enterprise is actually a farm based service, or the enterprise incorporates a direct marketing function. Examples of alternatives are: shiitake mushroom production, organic farming, cheese production on a dairy farm, a farm based bed and breakfast, an on-farm retail market, etc.

The converse definition of agricultural alternatives for this study is any farm based activity that is <u>not</u> the production of traditional commodities using conventional production methods where the production is marketed in raw form to a middleman. In other words, the converse definition of agricultural alternatives is basically the definition of traditional farming.

1.20 THE STATUS OF AGRICULTURAL ALTERNATIVES

Nontraditional or specialty commodities, as well as other agricultural alternatives—such as marketing directly to the consumer—have become more important to farmers, researchers, and governmental officials in the last few years. Results from a New York State direct marketing survey, which was conducted in 1988, indicate that in 1987, $112.3 million of agricultural products were sold directly to consumers and that 6,941 farmers were marketing at the retail level (New York State Department of Agriculture and Markets). Therefore, it appears that at least 17 percent of the farmers in New York State are incorporating direct marketing strategies into their operation (New York State Department of Agriculture and Markets). Given the definition of an alternative agricultural enterprise for this study, at least 17 percent of the farmers in New York state had an alternative enterprise in 1987.

Members of the agricultural community are supporting changes in traditional U.S. production agriculture. The federal government is devoting tax dollars for studying and promoting agricultural alternatives. The United States Department of Agriculture (USDA) is funding research to study alternative methods of production through its Low Input Sustainable Agriculture (LISA) program. Furthermore, one of the eight national Cooperative Extension initiatives is Alternative Agricultural Opportunities. Many land grant universities have devoted new cooperative extension resources to this area. Moreover, some have established institutes to study and provide information about alternative crops and livestock. For instance, the University of Minnesota operates The Center for Alternative Plant and Animal Products.

In New York State, there are several state and local programs which provide information and services for rural entrepreneurs. For example, the Temporary State

Commission on Tug Hill began its Agriculture Potentials Project in 1982 by identifying more than 100 innovative ways to strengthen the region's agricultural economy. The commission has emphasized farm diversification, direct marketing, and optimal land resource usage. Recently, the Commission has conducted the Fallow Deer Farming In Northern New York Project, which is supported by a research and development grant from the New York State Department of Agriculture and Markets. This project provides production advice for individuals who are considering raising deer for venison.

In addition to planning and production assistance, marketing support is provided for farmers in the state of New York. The Direct Marketing Office (in the New York State Department of Agriculture and Markets) assists farmers with nontraditional marketing strategies. Also, the Agricultural Marketing Service of Central New York (a project of the Central New York Planning Board) provides growers in the central New York region with current information on export marketing opportunities. The project's services are free and include: newsletters, overseas sales opportunity reports, international product show announcements, and assistance for developing an export marketing strategy. The Greenmarket, a not-for-profit program of the Council on the Environment of New York City, organizes and operates farmers markets in the metropolitan area.

New York State has also supported farming alternatives with financial assistance. A joint effort of the New York Job Development Authority and the USDA Farmers Home Administration earmarked one million dollars of subsidized loan funds for rural businesses including specialty commodity producers. The state of New York and its localities have taken an especially active role in promoting agricultural alternatives.

Another support group for innovative farmers in New York state is the Farming Alternatives Project at Cornell University, which is funded in part by the New York State Department of Agriculture and Markets. The Project was initiated in 1986 to support rural entrepreneurs. Rather than focusing on specific commodities, the Project emphasizes the business planning, marketing, and management issues involved in developing any new or

nontraditional farm-based enterprise. Project staff provide information, referrals, educational programming and resource materials for use by Extension agents and others helping farmers pursue new opportunities in agriculture. Another important purpose of the Project is to conduct research related to farming alternatives in New York State.

1.30 JUSTIFICATION OF RESEARCH

Trends in U.S. food consumption suggest increased demand for nontraditional foods, fresh foods, and safe foods—although much of the evidence is circumstantial. In the U.S., total supplies of specialty vegetables, herbs, and fruit have been rising in the 1980s (Greene). Furthermore, it is possible that more U.S. domestically raised supplies can be marketed because imports of specialty vegetables, herbs, and fruits have been increasing along with U.S. domestic supplies (Greene). The obvious question of whether the U.S. has a competitive advantage in the production of certain specialty crops in our domestic market is still not answered. Moreover, the question of do New York farmers have a competitive advantage in the production of certain specialty crops (for example basil) remain unanswered.

Second, numerous studies have documented the change in consumer preference from canned to fresh and frozen fruit and vegetables (Allen). Farmers in New York State are able to capitalize on this growing fresh fruit and vegetable demand since urban markets are in proximity to many of the state's farmers.

A third trend in consumer demand is the desire to purchase non-chemically produced or processed foods. Safe food concerns are driving an effective demand for organically produced foods. Although New York State does not estimate sales or production of organically grown feedstuffs and foodstuffs, one state, California, does. In California, total organic sales at the wholesale level increased from $1 million in 1977 to $50 million in 1987 (Greene). Furthermore, in California, there are now approximately 900 organic

growers with 30,000 acres under production of which it is estimated that 28 percent is sold directly to the consumer (Greene). Alternative enterprises and production methods are becoming more important to farmers and the agricultural community.

Because of these trends, market niches and profit opportunities are available for the nontraditional farmer. The Cooperative Extension Service and land grant universities have a long standing commitment to rural residents and farmers to provide information, educational programming, and research on potential profit making opportunities. Therefore, research in the area of farming alternatives is timely and appropriate.

2.00 DATA

The sample for this research is a judgment sample. Compiling a complete sample frame of New York State farmers with nontraditional enterprises was considered too costly. Therefore, an extensive list of farms having an on-going alternative enterprise in 1986 was gathered. The providers of names (with the number contributed in parentheses) were: county extension agents (110), New York State Department of Agriculture and Markets (140), Greenmarket (97), Natural Organic Farmers' Association of New York, Inc. (73), New York State Certified Farm Markets (58), New York State Aquaculture Association (41), International Herb Growers and Marketers (15), North American Deer Farmers Association (8), and various other sources (120).

The data for this study were collected in 1987 with a mail survey. Farmers were asked to provide information about the farm they managed for the 1986 year. The survey was sent after a pre-test was conducted to determine whether questions were clear and whether sensitive questions would be completed. The survey was conducted from the end of July to the middle of September. The mail questionaire was sent July 22nd and reminders were sent August 8th and September 10th.

The numerical details of the mail survey are as follows. There were 643

questionaires delivered out of the 662 originally mailed. The response rate of the people contacted was approximately 35 percent. The questionaires usable for describing the sample were approximately 26 percent of those people contacted.

2.10 GEOGRAPHIC EXAMINATION OF SURVEY AND DATA

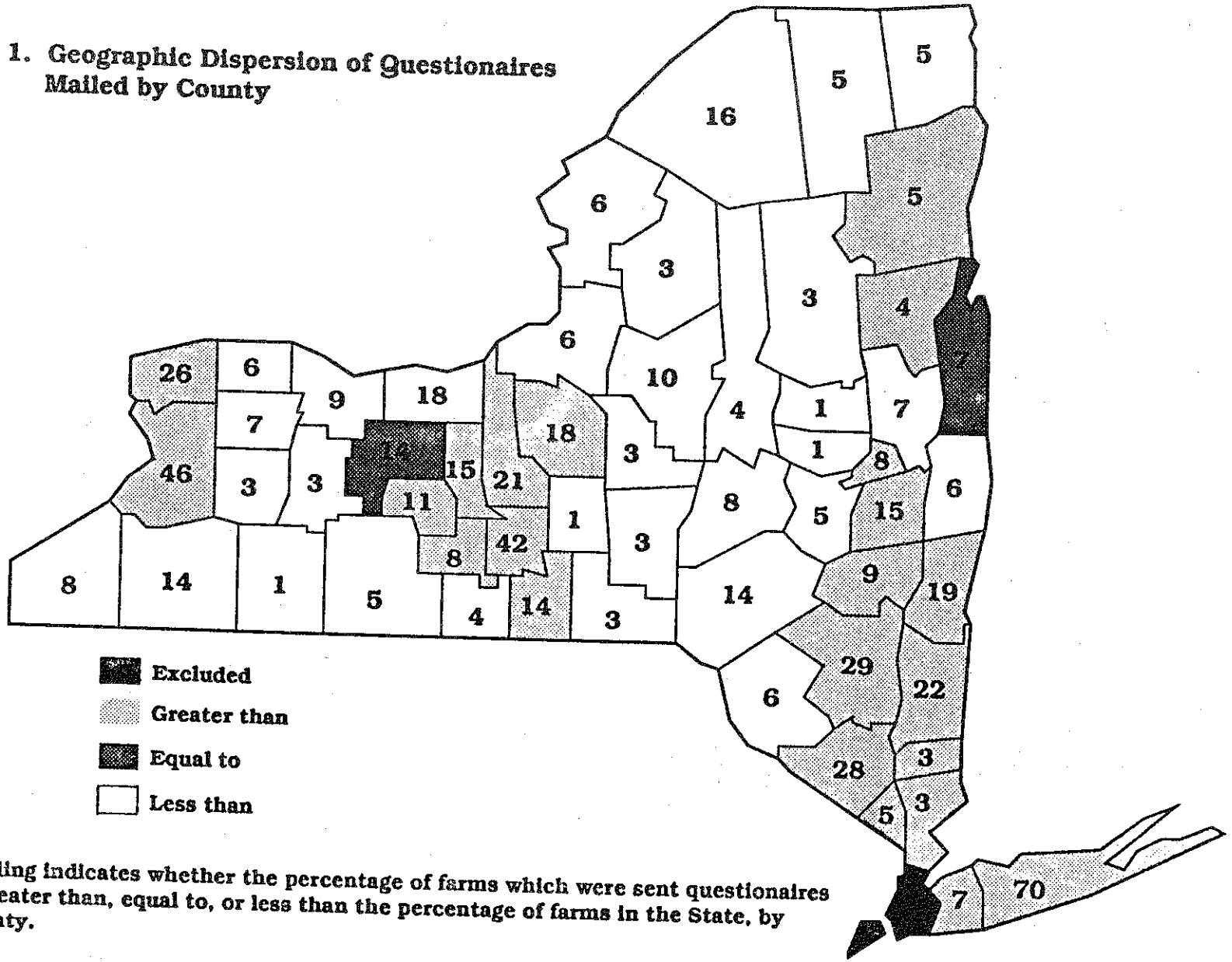
Although the data are from a judgment sample (not randomly generated), the geographical dispersion of the questionaires mailed and the dispersion of the sample, by New York counties, were investigated. Map 1 shows the number of questionaires mailed per county and the percentage of questionaires mailed relative to the percentage of New York State farms in the county. A relatively larger percentage of the questionaires was sent to the counties near New York City, Albany, Buffalo, Rochester, and to counties in the Finger Lakes Region. Although this sampling method is not random, it is of interest that the name generating process produced a higher concentration of alternative enterprises in counties closest to urban markets and in counties where the agricultural production enterprises are varied.

In Map 2, the number of useable surveys per county and the percentage of observations in the sample relative to the percentage of New York State farms per county are presented. Due to variations in mail questionaire return rates, some of the counties have changed in relative importance. Yet, the counties most represented in the sample are generally from the areas near New York City, Albany, Buffalo, Rochester, and those in the Finger Lakes Region.

2.20 NONRESPONSE

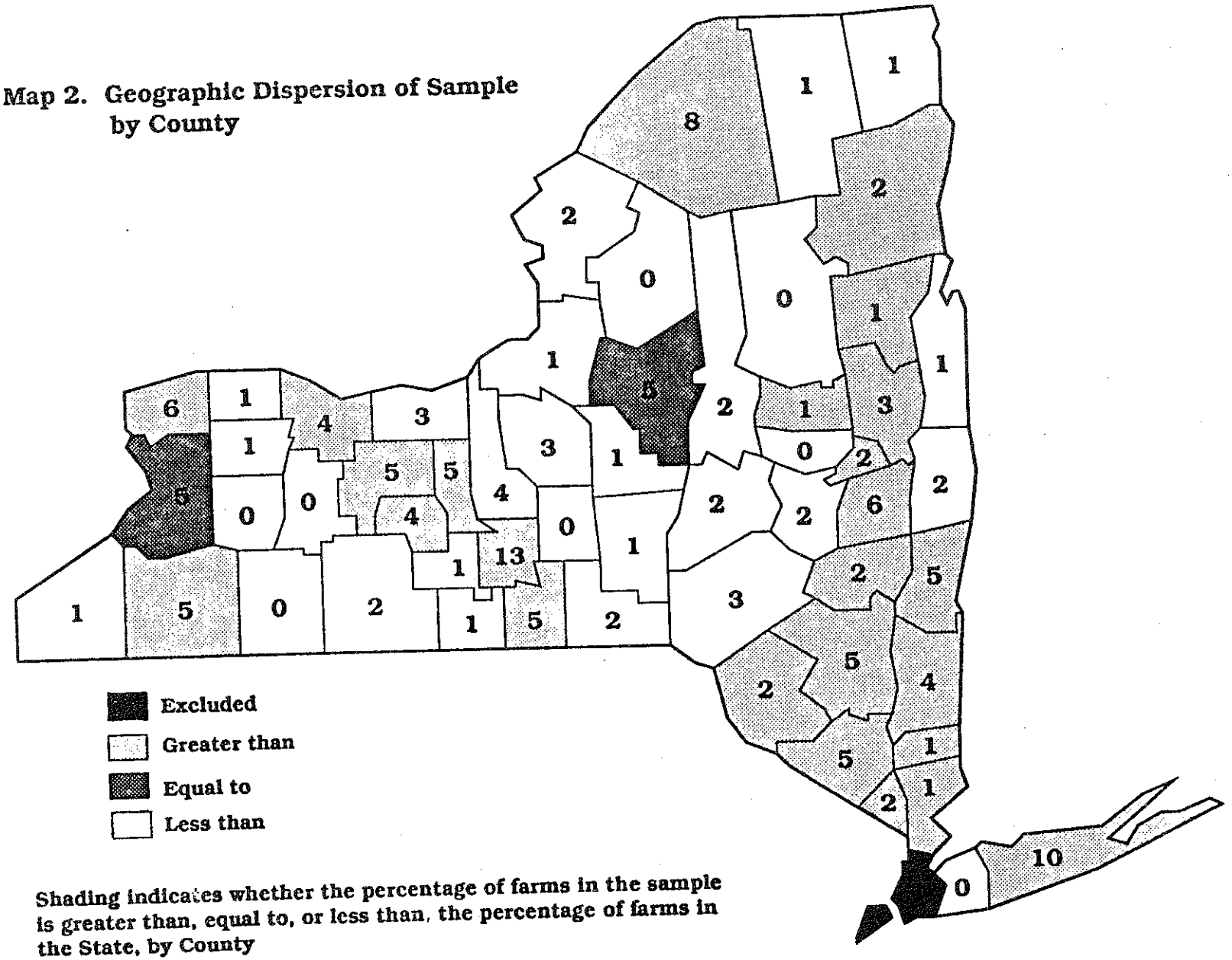
Because of the response rate of the mail survey, a limited telephone survey of nonrespondents was conducted. By interviewing a small number of mail survey nonrespondents, researchers believed that differences between those who returned and those who did not return the mail survey would be indicated. If differences were apparent,

Map 1. Geographic Dispersion of Questionaires Mailed by County



Shading indicates whether the percentage of farms which were sent questionaires is greater than, equal to, or less than the percentage of farms in the State, by County.

Map 2. Geographic Dispersion of Sample by County



Shading indicates whether the percentage of farms in the sample is greater than, equal to, or less than, the percentage of farms in the State, by County

then the response rate could be partially explained and/or systematic distortions of the data could be identified.

The telephone survey was conducted in April, 1989. There were 31 nonrespondents randomly selected for the telephone interview. Of the 31 nonrespondents, 25 were listed with Directory Assistance. There were 25 contacts made, but two of the principal farm operators, the required interviewees, were not available to complete the survey. Attempts to interview these farmers were suspended after the fourth call back.

The results of the small nonrespondent survey are mixed and conclusions from this survey may be tenuous. Of the 23 telephone survey respondents, one third were ineligible to complete the mail survey. These respondents were ineligible because they were not farmers. Extrapolating, it appears that the percentage of useable mail survey questionaires is not as low as it seems at first blush. The fact that one third of the sampled mail survey nonrespondents were ineligible is not surprising given the dearth of information about alternative farm enterprises.

The nonrespondents eligible to complete the mail survey appear to be comparable to those who replied to the mail survey. Of those 16 eligible to complete the telephone survey, 15 were still farmers with alternative enterprises. One of the farmers had retired. Therefore, it appears that the eligible nonrespondents are currently legitimate farmers with on-going alternative enterprises.

Since two-thirds of the telephone survey respondents appear to be eligible for the survey, selected attributes of the nonrespondents were compared to the mail survey respondents to determine if differences are apparent. The attributes selected are: (1) the percentage of farm income attributable to the alternative enterprise, (2) the percentage of household income from farm enterprises, and (3) the profitability of the alternative enterprise.

The nonrespondents had a lower mean for the percentage of farm income attributable

to the alternative enterprise. The mean percent farm income from the alternative for the nonrespondents was 46.0 percent. For the mail survey respondents, it was 65.5 percent. Still, the means were not significantly different at the 5 percent significance level. The statistical nonsignificance is understandable given the number of observations in the telephone sample and the standard deviations associated with the means. On the other hand, it does not appear that the nonrespondents of the mail survey operate smaller farms or have less profitable alternative enterprises. The mean for the percentage of household income from farm enterprises is 43.5 percent for the nonrespondents of the mail survey. For those who returned the mail survey it was 45.9 percent. Also, for the mail survey nonrespondents, the mean for the alternative enterprise profit level is 1.25, where 0 is "loss," 1 is "broke even," 2 is "modest profit," and 3 is "significant profit." For the mail survey respondents, the mean is 1.54. Consequently, no obvious overall difference between the respondents and nonrespondents of the mail survey is apparent.

To summarize, it appears that the low response rate can be partially attributed to a significant number of ineligible mail survey recipients who did not return the questionaire—even though instructions indicated to do so. Furthermore, it appears that the characteristics of those who returned and did not return the mail survey are not materially different. Hence, the low response rate does not appear to be of great concern.

3.00 DESCRIPTION OF SAMPLE

The following information on farming alternatives in New York State is reported: (1) the types of alternative enterprises which exist in New York State, (2) the characteristics of farmers who manage nontraditional operations, (3) the particulars about the farms which have alternative enterprises on them, (4) the attributes of the alternative enterprises, (5) the development process which preceded the commitment to undertake an alternative enterprise, and (6) the profitability of alternative enterprises in New York State.

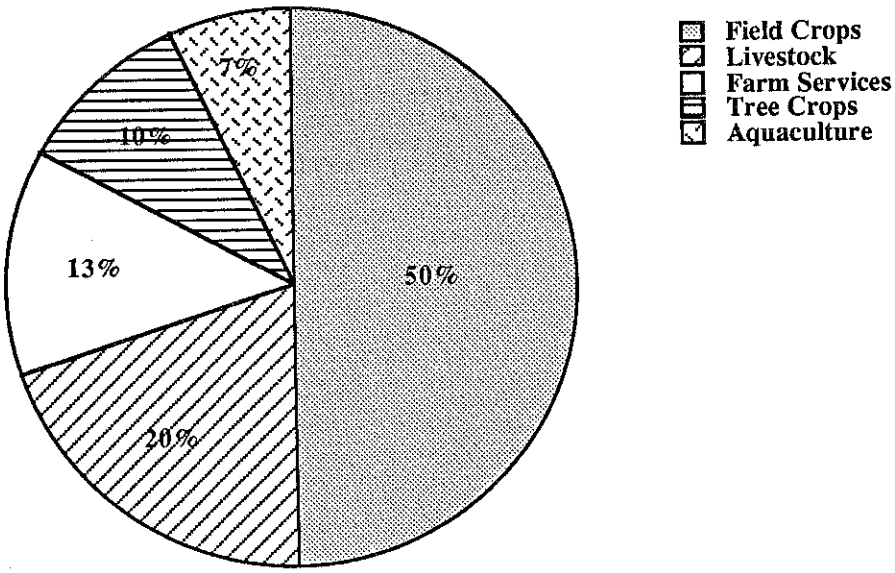
3.10 TYPES OF ALTERNATIVE ENTERPRISES

The diversity of alternative farm enterprises in this sample is substantial. To report on the types of alternative enterprises in an understandable and meaningful way, some aggregation of the enterprises is necessary. However, the categorization of enterprises is somewhat arbitrary and subjective. Some farms have more than one alternative enterprise or the enterprise incorporates more than one activity. For example, one farm has a greenhouse and raises specialty vegetables on their open acreage. Another raises vegetables, processes them, and sells them in a farm based retail market. Thus, for these types of farms or alternative enterprises, the chief alternate enterprise or activity in the enterprise are used to classify it.

The types of alternatives are aggregated into five major categories (Figure 1). The major enterprise categories (with the percentage of respondents in parentheses) are: field crops, horticulture, and fruit production (50%); livestock production (20%); farm based services which were all non-production enterprises (13%); tree crops, excluding fruit production (10%); and aquaculture (7%).

Within the five enterprise categories, alternatives are grouped into minor classes which denote the type of production. The minor classes for the field crops, horticulture, and fruit production category (with the number of respondents in parentheses) are: vegetables (14), flowers (5), herbs (5), small fruit (12), greenhouse crops (11), tree fruit (4), wine making (4), table grapes (3), and other (21). The "other" category includes the production of: highly diversified crops, sprouts, canola, sunflower seeds, popcorn, sod, hydroponically grown vegetables, etc. Some classes appear to denote traditional production enterprises; for example, vegetables and tree fruit production. However, enterprises in these classes are alternatives because there is either a direct marketing component or the crop is organically produced. In this major category, 14 enterprises incorporate organic production practices.

Figure 1. Alternative Enterprise Types



The minor classes for the livestock category (with the number of respondents in parentheses) are: deer farming (7), milk goats (2), beef (4), rabbits (3), sheep (3), exotic animals (3), poultry (3), swine (1), and mixed livestock (5). Again, some of the classes appear to be traditional farm enterprises, such as beef, swine, sheep, and poultry. However, the livestock were either grown organically or the production was sold directly to the consumer. Eight livestock enterprises use organic methods.

The classes for the farm based services category (with the number of respondents in parentheses) are: retail markets (7), food processing operations (4), educational tours (4), recreational ventures (2), and other (4). The "other" group included an accounting service, a farm sitting service, and a bed and breakfast.

The classes which denote the type of production enterprises for the tree crops major category (with the number of respondents in parentheses) are: Christmas trees (7), maple syrup (6), nursery stock (3), and firewood (1).

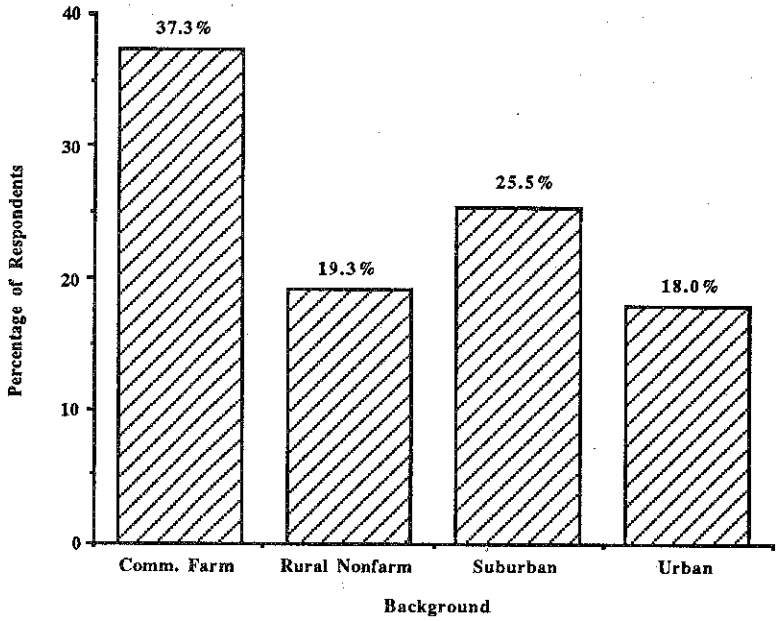
The aquaculture major category included trout, salmon, and bait fish production enterprises.

3.20 CHARACTERISTICS OF PRINCIPAL FARM OPERATORS

To better understand the types of farmers who operate alternative enterprises, four characteristics are examined. They are: (1) the childhood background (up to age 18) of the principal farm operator, (2) the formal educational level of the principal farm operator, (3) the active farm management experience of the farmer, and (4) the sex of the principal farm operators.

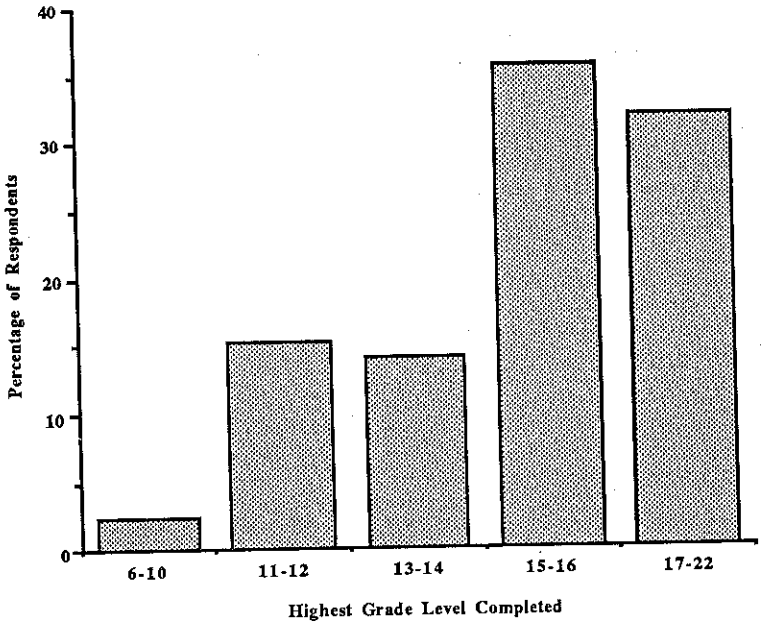
Most of the farmers in this sample spent at least part of their formative years in rural areas and a substantial number are from commercial farm backgrounds. However, many come from more urban environments. Of the farmers in the sample, 37 percent came from a farm background, 19 percent from a rural nonfarm setting, 26 percent from a suburban environment, and 18 percent from an urban area (Figure 2).

Figure 2. Background of Farm Operator



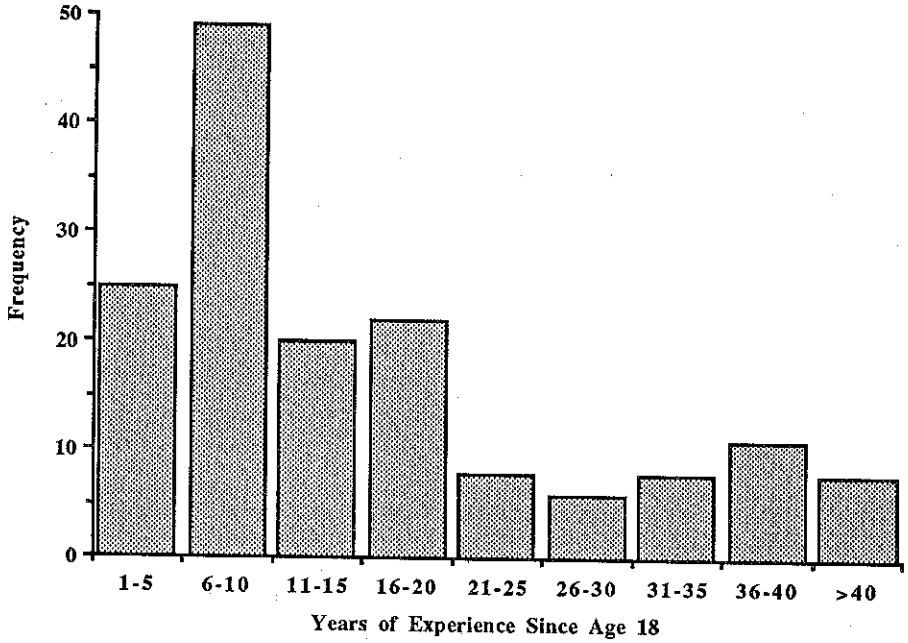
This sample of farming innovators has had a substantial amount of formal training and has more formal training than other groups of farmers (Figure 3). The average years of education completed by the farm manager was 15 years, three years of post high school training. This educational level is 3 years higher than the educational level of farmers in the Bruce and McGonigal study. The average is two years higher than the educational level of the dairy farmers in the Cornell Dairy Farm Management Business Summary.

Figure 3. Educational Level of Principal Farm Operator



The principal farm operators in this sample are experienced farmers. For this sample, the average term of farm management experience is 16 years (Figure 4). Because these data have many large values which may influence the mean, the median value for years of experience, 11, is also reported.

Figure 4. Active Farming Experience of Principal Farm Operator



The number of female principal farm operators in this sample is relatively higher than in other groups of New York State farmers. Eighty five percent of the principal farm operators in this sample were men. This proportion is somewhat smaller than in other surveys. Ninety eight percent of the farm managers surveyed by Bruce and McGonigal were males.

To summarize, while this group of farm managers differs somewhat from the typical commercial farmer in New York state, they are experienced farm operators.

3.30 FARM ATTRIBUTES

The structure of the farm business provides more insight about alternative farming in this sample. The attributes examined are: (1) farm size as measured by total acres owned and rented, (2) the percentage of farms that added or dropped an enterprise in the last 10

years, (3) the importance of the farming operation as measured by the percentage of household income the farming operation provides, and (4) the importance of the alternative to the farm as measured by its percentage of the percentage of household income that the farming operation provides. Although this last number appears confusing (because it is a percentage of a percentage), mathematically, the number can be thought of as the dollars of alternative enterprise income contributed to the household per $100 of farm income contributed to the household.

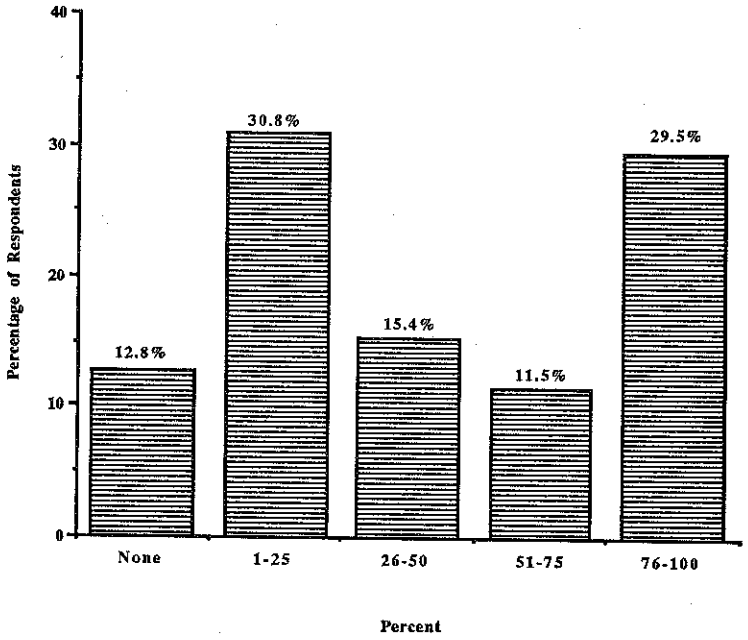
The farms in this sample are not just small farms and part-time farms. The average acreage owned and rented consists of 230 acres. The average acreage per farm in the state of New York was 207 acres in 1986 (New York Agricultural Statistics). Thus, on average, farms in the sample are not smaller than the average farm in New York. The range of acreage is from 1 to 4,500 acres. Although 1 acre does not seem to be large enough for a farm, a part-time greenhouse operation does not require much acreage and can generate substantial gross sales.

In the last ten years, the structure of most of the farms in the sample has changed. Of the respondents, 81 percent have changed enterprises during the last ten years. Thus, these farms have not produced the same commodities year after year. However, our data do not indicate the magnitude of the change since the question did not ask whether the principal enterprise had been changed in the last 10 years.

In this sample, the farming operation provides a substantial percentage of the household income; however, off farm employment provides the same amount of household income. In this sample, an average of 46 percent of the household income is derived from the farm (Figure 5). The remaining household income is divided between off-farm employment, 46 percent, and other sources, 8 percent. Thus, these farms in the survey are a mixture of full-time and part-time farms. Furthermore, extremes are important in this sample. For example, 25 percent of the farms had over 90 percent of their household

income attributable to the farming operation. On the other hand, another 25 percent of the farms had 6 percent or less of their household income provided by the farm.

Figure 5. Percent of Household Income From Farming, 1986



The alternative enterprise was the principal enterprise on the farm for many of these respondents. Of the household income from farming, 65 percent was attributed to the alternative enterprise. In other words, there was $65 of alternative enterprise income contributed to the household per $100 of farm income contributed to the household.

In summary, many of the farms in the sample are quite large and the farm managers operate large alternative enterprises. Thus, alternative farm enterprises are not just a way to supplement farm income or household income.

3.40 ALTERNATIVE ENTERPRISE DEVELOPMENT PROCESS

To understand the attributes of on-going alternative enterprises, the process for

developing the enterprises in the sample was investigated. Within the development process, four areas are examined. They are: (1) who was responsible for initiating the enterprise, (2) what was the source for the idea of the enterprise, (3) what was the impetus for starting the enterprise, and (4) what feasibility analysis was performed.

The responsibility for initiating the enterprise was split into two parts. They are: (1) who proposed the idea for the enterprise, and (2) who caused the alternative enterprise to materialize? In the first case, the principal farm operator was the originator of the alternative enterprise idea for 59 percent of the sample. For the remainder of the immediate household, the spouse was the suggester of the enterprise for 7 percent of the sample and a son for 1 percent. Two or more household members jointly suggested the idea for 13 percent of the sample. Other people, including relatives and partners, suggested the original idea for 20 percent of the sample.

The person who made the alternative enterprise materialize sometimes differed from the originator of the idea. Again, the majority of the initiators were the principal farm operators. They started the enterprise 64 percent of the time in this sample. The spouse started the alternative 7 percent of the time, which is equal to the percentage of the time that spouses suggested the idea. A son or daughter did not start any of the alternatives by themselves in this sample. Nevertheless, more than one member of the household, including sons and daughters, jointly started the alternative 24 percent of the time. Other people, including relatives and partners, started the enterprise for 5 percent of the sample. Cooperative action appears to be an important part of the development process for many alternative enterprises; however, the principal operator is typically responsible for the origination of the alternative enterprise.

The idea for the enterprise came from various sources. In the sample, 8 percent of the respondents answered that the original source of the idea came from a magazine or book, 14 percent heard about the alternative from another producer, and 11 percent saw a

similar product or service elsewhere. In this sample, 23 percent reported that the idea for the enterprise was developed independently. For 26 percent of the sample, an "other" source was used and 18 percent used multiple sources.

In addition to considering who initiated the alternative enterprises and the sources of information about the alternative enterprises, the motivation for starting an alternative enterprise is also of interest. The two points are addressed. They are the question of whether financial stress was a critical factor for starting an alternative enterprise and the goals for starting an alternative enterprise.

Financial stress was apparently not a critical factor for establishing an alternative enterprise (Figure 6). In the sample, 43 percent of the farmers reported that they were experiencing no financial stress and that they did not expect future financial problems at the time the alternative enterprise was started. Furthermore, 31 percent stated that they were having no trouble with finances, but were concerned about the future. However, at the outset of the enterprise, 15 percent reported that they were having a little difficulty with finances and 11 percent stated that they were having major financial problems. All in all, it does not appear that financial stress was an impetus for starting an alternative enterprise in this sample.

Financial stress is further evaluated by splitting the sample into groups based on the percentage of household income that is attributable to farming. The groups are: farm earnings dominate household income sources (FED)—household income from farming operations is equal to or greater than 50 percent—and non-farm earnings dominate (NON FED)—household income from farming operations is less than 50 percent.

Respondents who rely on the farm for a majority of their household income appeared to be under more financial stress at the start of the alternative enterprise (Figure 7). This observation has some intuitive logic since farming is a risky business which sometimes has lumpy income streams and nonfarm income tends to have steady income streams.

Therefore, those respondents who rely mainly on income from farming could be expected to have more financial concerns.

Figure 6. Degree of Financial Stress at Time of Enterprise Start-up

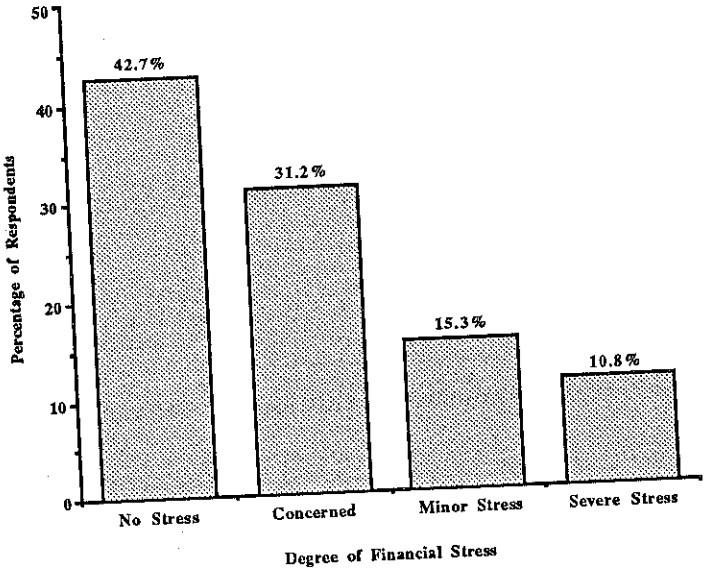
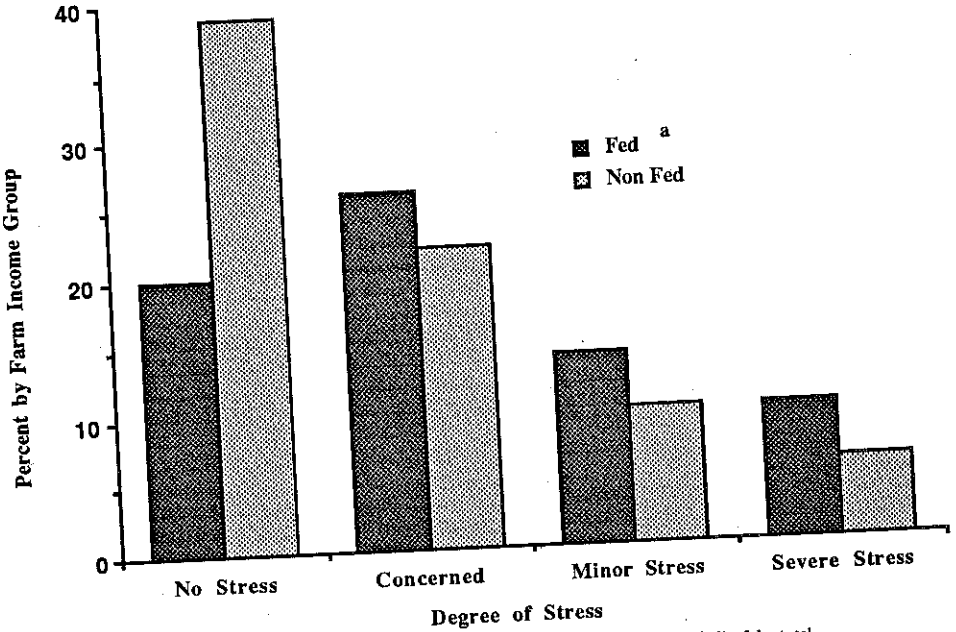


Figure 7. Stress at Start of Enterprise by Farm Income



[a] FED: household income from farming operations is equal to or greater than 50% of the total
NON FED: household income from farming operations is less than 50%

The respondents had various goals for establishing their alternative enterprise. For this sample, 34 percent of the respondents stated that the most important goal in starting the enterprise was to increase income. Furthermore, 4 percent reported that the alternative was started to improve cash flow, 7 percent to utilize existing resources, and 8 percent to exploit an existing market opportunity. On the other hand, 14 percent established the alternative to develop an enjoyable activity, 7 percent to be their own boss, and 8 percent to do something different or unique. Of the remaining choices offered in the survey instrument, none stated that their primary goal was to use available labor and 18 percent had an "other" reason. From the surveys, the "other" primary goals were typically personal restatements of the provided categories on the survey instrument.

A disturbingly low proportion of farmers performed a feasibility analysis unless the alternatives were started in a small, experimental way. In the sample, 47 percent of the respondents stated that they performed neither a financial nor a marketing analysis. When the feasibility analysis information is examined by age of the enterprise, an encouraging observation is uncovered. Of the enterprises that are less than 10 years old, 68 percent of the respondents performed some type of financial or marketing analysis. Hopefully, this indicates a trend toward more analysis.

3.50 CURRENT MANAGEMENT ISSUES OF ALTERNATIVE ENTERPRISES

Several management responsibilities were explored in the survey. These management issues are: (1) who was primarily responsible for overseeing the alternative enterprise, (2) who was primarily responsible for marketing, (3) what were the marketing channels used, (4) who provided significant amount of production labor, (5) what are the seasonal labor requirements, (6) are financial records for the alternative enterprise maintained, and (7) in the opinion of the respondents, what factor is most critical to the success of an alternative enterprise.

In general, the principal farm operator is primarily responsible for the management of

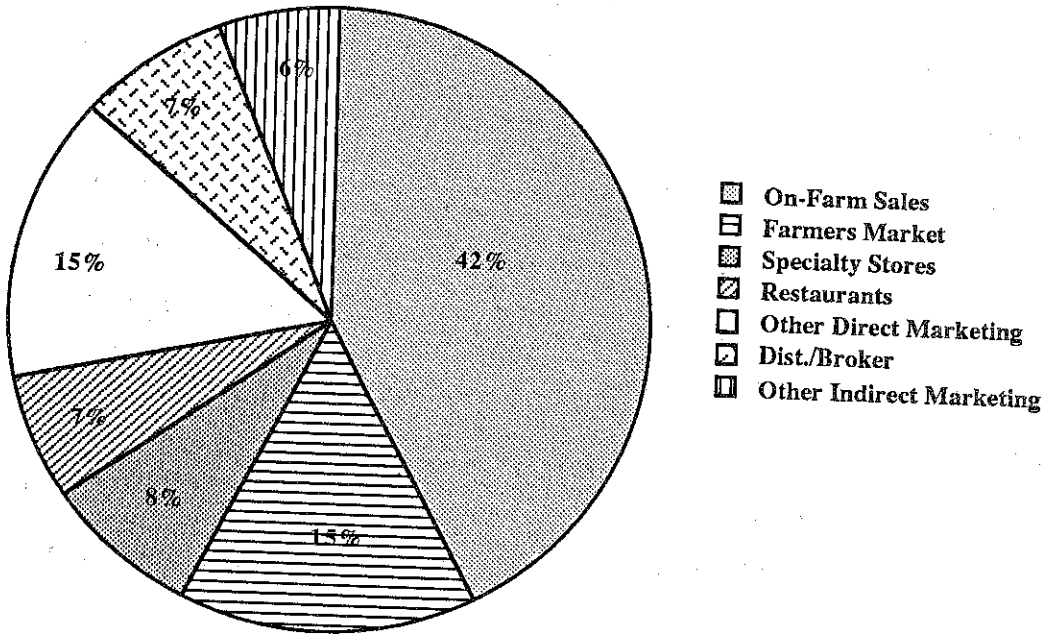
the alternative enterprise. In the sample, 83 percent of the respondents stated that the principal operator was primarily responsible for overseeing the alternative enterprise. For the others, 12 percent reported that the spouse was responsible, 1 percent that a son was, 1 percent that a daughter was, and 3 percent responded "other".

Also, in this sample, the principal farm operator is primarily responsible for marketing. For this sample, 72 percent of the respondents stated that the principal operator was primarily responsible for marketing. For the others, 18 percent of the farmers responded that the spouse was, 3 percent that a son was, 2 percent that a daughter was, and 6 percent marked "other".

For these innovative farmers, direct marketing of production was most prevalent (Figure 8). In the sample, 42 percent of the sales from the alternative enterprise were on the farm. Furthermore, 15 percent of the sales were at farmers' markets, 8 percent were to specialty stores, 7 percent to restaurants, and 15 percent through some other type of direct marketing, such as mail order. Otherwise, only 13 percent of the sales were marketed in an indirect manner such as to a cooperative or to a broker. Directly marketing the production from the alternative enterprise is probably the most commonly shared trait that the respondents in this sample have.

Another management area of interest is production. The members who provided significant amounts of production labor are: the principal farm operators 27 percent, spouses 3 percent, sons 3 percent, "other" 12 percent, multiple members of the household 55 percent. Thus, production labor is generally shared by members of the household and that the labor is mostly provided by the household.

Figure 8. Marketing Channels: Average Share of 1986 Sales



In general, the seasonal labor requirements do not differ with those of traditional farming. Seasonal labor requirements are high during the late spring, throughout the summer, and during the early fall. Because the labor requirements of the alternatives do not appear to differ from those of traditional agriculture, the observation that no one selected "to make use of available labor" as a goal for starting an alternative seems logical. Exceptions did exist in the sample. Some alternative enterprises did have different high seasonal labor requirements. For example, maple sugar and Christmas tree production high seasonal labor requirements were in the late fall and early winter.

The alternative farmers in this sample rely on financial records to manage the alternative enterprise. For this sample, 92 percent of the respondents use some type of financial statement to regularly monitor the performance of the alternative enterprise. This observation stands somewhat in contrast to the financial or marketing analysis that was performed before the alternative enterprise was started.

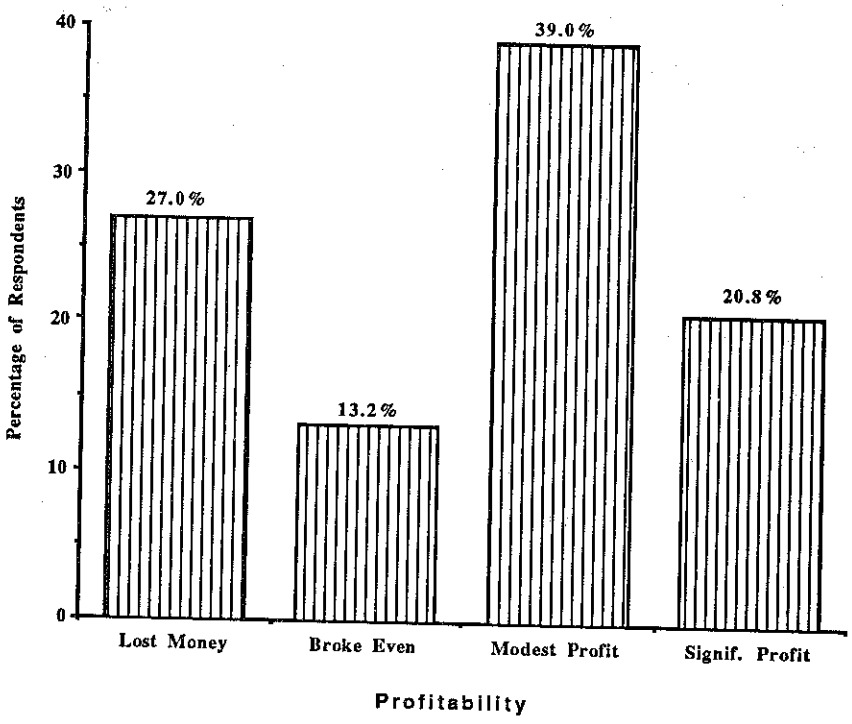
A final management perspective concerns the factors that these alternative farmers believe are critical to the success of their alternative enterprise. The category, marketing skills, was selected by 28 percent of the respondents as the most critical factor for success. The next largest factor selected was production skills. In the sample, 14 percent of farmers marked this factor. Furthermore, 12 percent of the respondents selected business management skills as being most critical, 10 percent marked financial resources, 9 percent human relations, 8 percent location, 5 percent available labor, 5 percent land or soil, and 9 percent selected other factors. These operators had highly varied viewpoints about the most critical factor for the success of an alternative enterprise.

It was surprising that location was not considered as critical for success. Since 42 percent of the sales were made on the farm, location would appear to be a very critical factor for success. Furthermore, the majority of the farms in this sample are located near metropolitan areas and in the Finger Lakes Region. Thus, location may be taken for granted.

3.60 ALTERNATIVE ENTERPRISE PROFITABILITY

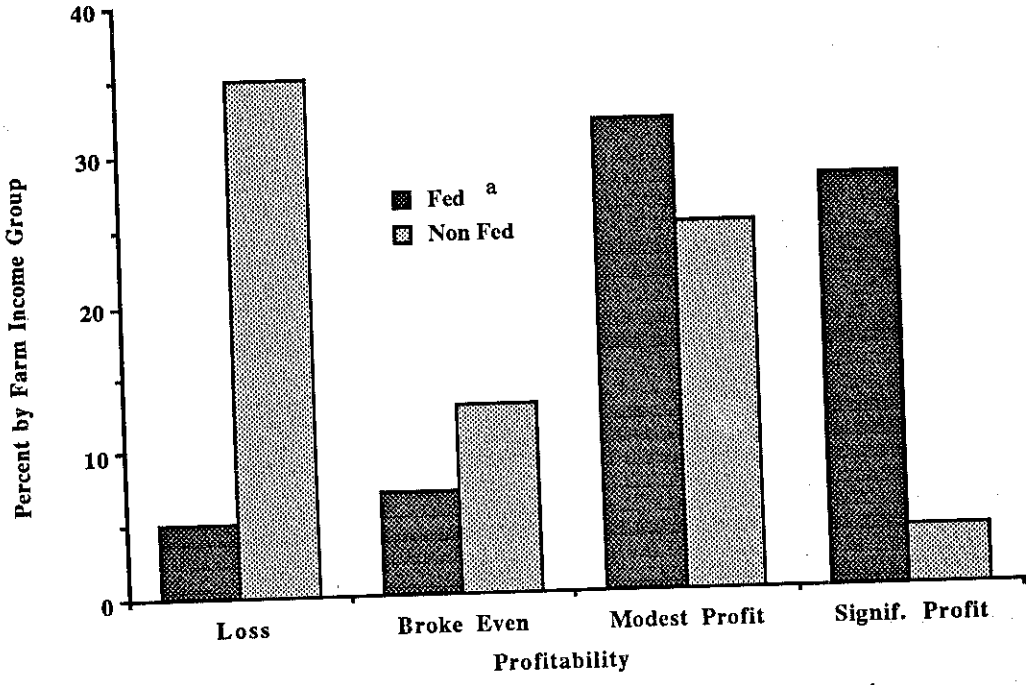
An important question is whether alternative enterprises can be profitable (Figure 9). In the sample, 21 percent of the farmers reported a significant profit from the alternative enterprise. Another, 39 percent reported a modest profit was earned from the alternative. On the other hand, farming alternatives may not necessarily be a financial help to the farm since 13 percent of the respondents reported that the alternative only broke even and 27 percent indicated that their alternative enterprise lost money. These data reinforce the need for careful analysis before starting an alternative enterprise. Such alternatives can be risky.

Figure 9. Enterprise Profitability in 1986



To further examine alternative enterprise profitability, the sample is split into groups based on the percentage of household income that is attributable to farming. The groups are: farm earnings dominate household income sources (FED)—household income from farming operations is equal to or greater than 50 percent of the total—and non-farm earnings dominate (NON FED)—household income from farming operations is less than 50 percent. Respondents who relied on the farm for a majority of their household income appeared to be more profitable (Figure 10).

Figure 10. Alternative Enterprise Profitability by Farm Income



[a] FED: household income from farming operations is equal to or greater than 50% of the total

NON FED: household income from farming operations is less than 50%

4.00 CONCLUSIONS

This study of farmers who operated alternative enterprises in 1986 has provided some valuable information about non-traditional farming. To review, the farmers who were sent questionaires were mostly around the major metropolitan areas of the state and the Finger Lakes. Although the means for generating survey respondents may be partially responsible for this, it is plausible that farms with alternative enterprises may be predominantly from these areas of the state.

Second, the principal farm managers in this sample are from various childhood backgrounds; have a large number of years of formal training; are experienced farm managers; and are predominantly male. These farmers have somewhat different

characteristics from the farmers in the Bruce and McGonigal panel. The farmers in this sample had received more years of formal training and there were more women managers. Therefore, educational programs aimed at this group of farmers should recognize these characteristics.

Third, the farms in this sample were not just small, part-time farms. The alternative enterprises were the predominant enterprises on many of the farms. Therefore, alternative enterprises may require substantial amounts of capital and other resources.

Fourth, the examination of the development stage for the alternative enterprise led to some interesting observations. The principal farm manager is critical in the developmental stage. Yet, cooperation between family members and others is likely to be important during the development stage too. In general, the principal farm operator was originator of the idea for the alternative enterprise. Moreover, the principal farm operator was generally the one who actually made the alternative enterprise materialize.

For the majority of the farmers in this sample, financial stress was not an impetus for starting the alternative enterprise. This observation is revealing since much of the recent interest in farming alternatives was initiated because of actual and perceived financial stress in the agricultural sector.

On a similar note, the goal for starting an alternative enterprise was not always financial. Therefore, the fact that little feasibility analysis was performed before starting the alternative is not totally surprising. The examination of the developmental stage for these alternative enterprises has created more questions than answers about alternatives.

Fifth, the investigation of management issues also uncovered interesting observations. The principal farm operator was mostly responsible for the management of the alternative enterprise. This observation is logical since the alternative enterprise was the dominant enterprise in many cases. The farms in this sample generally marketed some portion of their production directly to the consumer. Farmers in this sample are vertically

integrating their operation and are apparently trying to obtain a larger share of the marketing dollar than obtained by traditional farmers. Although feasibility analysis was not performed, most of the farmers in the sample stated that they kept some type of financial records on the alternative enterprise. Thus, the management function of an on-going alternative enterprise appears to be more of a "management by the numbers" style than when the enterprise was in the developmental stage. The last observation was the wide ranging response to the question of the most critical factors for success. While marketing skills were believed the most critical for an alternative enterprise to succeed, many other factors were listed as well.

Sixth and last, many alternative enterprises appear to be profitable, but like other businesses, they can also be unprofitable. Thus, farming alternatives may be just as risky as other farming enterprises and their addition may or may not increase farm profitability.

5.00 POLICY IMPLICATIONS

Those who are engaged in agricultural alternatives believe that marketing skills, production skills, and business management skills—in that order— are necessary for successful operations. Programs that provide information and training in these areas may be well received by operators of alternative enterprises. Moreover, those who are engaged in educational and research programs in agriculture believe that skills in marketing, production, and business management are all critical for successful operations. Therefore, programs that provide training in all of these areas are appropriate. Specific training programs could be developed by drawing upon suggestions from innovative farmers, extension agents, educators, and researchers who are familiar with the needs of those pursuing farming alternatives.

Implicit with the above training suggestions is that agricultural alternatives should receive some institutional support. The first group of institutions to consider are publicly funded ones. With regards to training, cooperative extension personnel could conduct the

training seminars. Also, existing educational institutions such as community colleges, business development centers, and the university system could provide training programs.

In addition to providing training, the university system should be expected to continue research related to the economics of alternatives as well as provide biological and production related research.

The question of what is the proper level of public resources that should be committed to agricultural alternatives is still unanswered. First of all, farming alternatives can be profitable, yet they can be unprofitable as well. Farming alternatives are not a guarantee of improved farm profitability. Therefore, indiscriminate funding of programs related to farming alternatives does not guarantee a benefit to farmers or the public. However, it appears that a significant number of farms could be served by public funds and public institutions.

Along these same lines of institutional support, do private institutions for alternatives have merit? Would a professional organization of alternative agricultural entrepreneurs meet some unaddressed needs of innovative farmers? Are marketing associations for alternative products a viable alternative or complement to direct marketing? Can producer cooperatives aid the innovative farmer?

One overwhelming conclusion from this study is that there is still much to be learned about farming alternatives in New York State and how farming alternatives can be supported. Additional studies should be undertaken to expand the knowledge base of farming alternatives and their role in the New York's agricultural economy.

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