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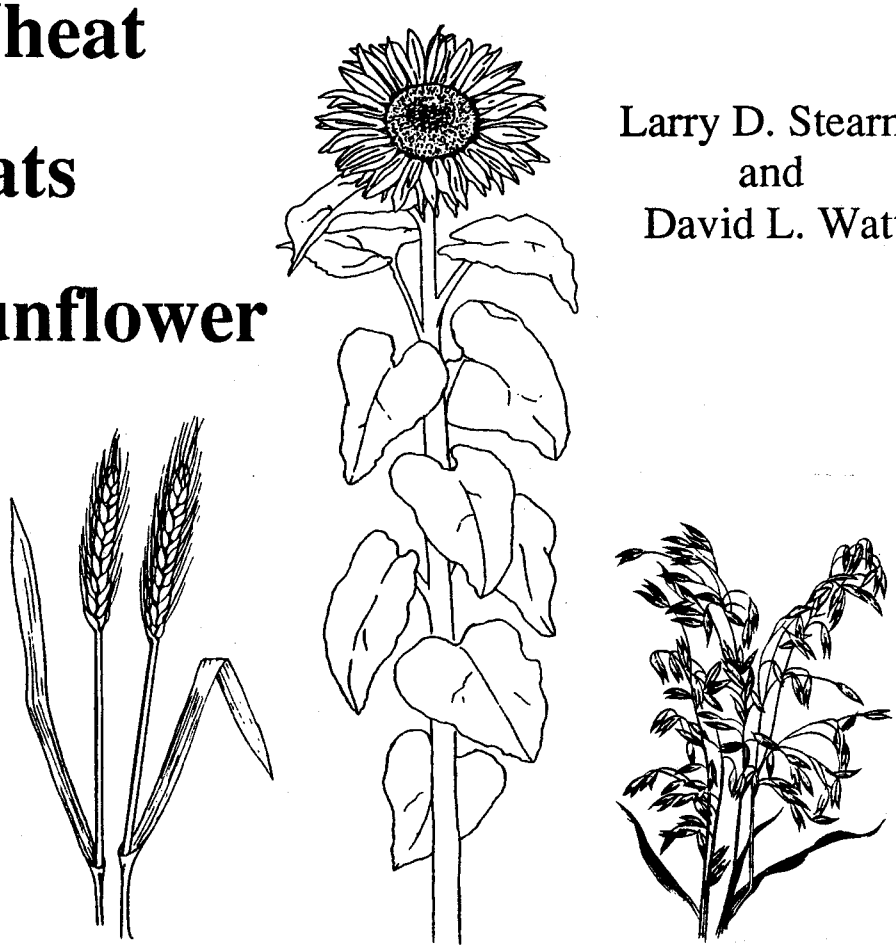
Northern Plains Organic Crops Marketing Analysis:

Wheat
Oats
Sunflower



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The authors accept responsibility for any remaining errors or omissions.

TABLE OF CONTENTS

	Page
LIST OF TABLES	iii
HIGHLIGHTS	iv
INTRODUCTION	1
Organic Market Analysis	1
Organic Farming	1
The Northern Plains	2
Certification	2
OBJECTIVES	5
METHODS	5
Producers	6
Buyers and Processors	7
Distributors and Retailers	7
RESULTS	7
Demand	7
Current Demand	7
Potential Demand	8
Supply	8
Current Supply	8
Crop Acreage	9
Potential Supply	10
Producer Perceptions	11
Constraints	11
Experiences	12
Suggestions to Enhance Demand	13
Buyer/Processor Responses	13
Purchasing Problems	14
Buyers'/Processors' Proposed Answers to Purchasers' Problems	15
Sales Problems	15
Suggestions to Enhance Demand	16
Distributors'/Retailers' Responses	17
Sales Problems	17
Suggestions to Enhance Demand	18
SUMMARY	18
IMPLICATIONS	19

TABLE OF CONTENTS (Cont.)

Page

BIBLIOGRAPHY 21

APPENDIX A - Survey Instruments 23

APPENDIX B - Organic Buyers 33

LIST OF TABLES

No.		Page
1	Farmer Organizational Membership and Completed Surveys by Organization and State, 1992	6
2	Average and Estimated Total Acres Farmed, Owned, and Certified Organic for North Dakota, South Dakota, and Minnesota Organic Farmers, by Organizational Membership and State, 1991	8
3	Estimated Total Acres, Average Acres, and Yields for Wheat, Oats, Sunflower, and Other Crops for North Dakota, South Dakota and Minnesota Organic Farmers, by State, 1991	9
4	Percent of Wheat, Oats, and Sunflower Crops Marketed as Organic by North Dakota, South Dakota, and Minnesota Organic Farmers, 1991	10
5	Percentage of Farmers Planning to Certify More Organic Cropland and Increased Number of Acres for 1992 and 1993 in North Dakota, South Dakota and Minnesota, 1991	10
6	Percent of Organic Farmers Who Would Increase Acreage and Number of Additional Acres They Would Add of Wheat, Oats, and Sunflower for North Dakota, South Dakota, and Minnesota, 1991	11

Highlights

The Northern Plains (namely North Dakota, South Dakota, and Minnesota) may hold a comparative advantage in production of organically raised crops because of its clean air and unpolluted environment. North Dakota has more certified organic acres than any other state. The ability of the Northern Plains to contribute to this market is suggested by the large number of organic farmers and certified organic acres. A number of organic commodity buyers, located primarily in Minnesota and South Dakota, are purchasing products raised in the Northern Plains area.

This study was initiated to identify constraints in the Northern Plains organic crop markets of wheat, oats, and sunflower. The study also provides information about supply, marketing channels, demand, and market share for these organically raised commodities. This information will help producers of organic commodities, organic farming groups, organic buyers and grain handlers, agricultural lending institutions, wholesale marketing agencies, and retail outlets to understand and expand organic marketing channels. Buyers will be able to more accurately analyze supplies of organically raised commodities. An understanding of the market should assist producers, processors, and distributors in cooperating to alleviate the problems in the marketing channels and enable farmers choosing to use organic practices to market their commodities and obtain organic premiums. This, in turn, may encourage increased numbers of producers and buyers to expand marketing channels and aid economic development.

Northern Plains organic producers delivered crops to buyers and producers in nine states and Canada in 1991. Organic buyers in the region reported buying wheat from seven states, oats from seven states and Canada, and sunflower from six states. Buyers indicated the greatest potential for increased demand was in European and Far East regions. They also suggested that the coastal states and Midwest areas of the United States held potential for increased domestic demand.

Estimated certified organic acreage exceeded 170,000 acres in North Dakota, South Dakota, and Minnesota. In 1991, approximately 50,000 acres were planted to organic wheat; 20,000 acres to oats; 22,000 acres to sunflower; and 71,000 acres to other crops. Approximately 50 percent of North Dakota organic farmers, nearly 40 percent of South Dakota organic farmers, and approximately 20 percent of Minnesota organic farmers indicated they would increase certified acreage in 1992 and 1993 if the markets were favorable.

Regional organic producers said that slow movement of grain and slow payment for crops were the primary constraints to smooth marketing of organic crops. They indicated that improved communications throughout the marketing channels would improve grain movement and that an advertising program to increase consumer awareness of the health and environmental benefits from organic farming would increase demand for their products. Buyer/processors indicated that quality problems in organic crops was the biggest problem they encountered. They stated that producer education to crop marketing standards would help

alleviate their marketing problems and that consumer education would improve demand for organic products.

Retailers reported few problems when sourcing organic products. They thought that they had selected reputable distributors through the years. Most retailers did not know the geographic source of most of the products they sell. Like the producers, buyers, and processors, retailers agreed that consumer education is the chief method to increase demand for organic products. All participants in the organic food marketing chain said that when the consumer becomes aware of the chemical-free methods of production, they will be willing to pay a premium for organically raised crops. Retailers are also using recipes, samples, and other displays to increase sales.

NORTHERN PLAINS ORGANIC CROPS MARKETING ANALYSIS

Larry D. Stearns and David L. Watt*

INTRODUCTION

The marketplace for organically grown food is steadily increasing. Consumers want additional supplies, and the organic food industry is seeking ways to respond. In the 1980s, retail sales of organic food products increased seven-fold, to $1.25 billion nationwide according to New York-based *Marketdata*. Sales are expected to triple again by 1995. Organic acreage jumped from 8,000 to 60,000 acres in the past five years, and farm-gate receipts are expected to rise from $90 million in 1990 to $150 million in California in 1991. However, while the dollar amount of organic produce sales increased $51 million from 1989 to 1990, the increase in tonnage was more spectacular--75 to 100 percent more--indicating that prices for organic produce were declining. More product is moving per dollar of sale (Johnson 1991). On the national level, sales of organic foods increased from $174 million in 1980 to $1.25 billion in 1989. Interstate and international shipments of organic crops have increased (Lynch 1991).

Organic Market Analysis

This study was initiated to identify constraints in the Northern Plains organic crop markets of wheat, oats, and sunflower. The study also provides information about supply, marketing channels, demand, and market share for these organically raised commodities. This information will help producers of organic commodities, organic farming groups, organic buyers and grain handlers, agricultural lending institutions, wholesale marketing agencies, and retail outlets to understand and expand organic marketing channels. Buyers will be able to more accurately analyze supplies of organically raised commodities. An understanding of the market should assist producers, processors, and distributors in cooperating to alleviate the problems in the marketing channels and enable producers, choosing to use organic practices, to market their commodities, and obtain organic premiums. This, in turn, may encourage increased numbers of producers and buyers to expand organic crops markets.

Organic Farming

Organic farmers, recognizing the potential harm to the environment of conventional agriculture, have developed alternative practices to reduce input costs, preserve the resource base, and protect human health. To qualify for premiums, the farmer must meet certification requirements to prove that they have not applied commercially produced synthetic fertilizers and pesticides to their crop acres for three years.

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The transition to organic farming is a costly, time-consuming procedure. Reduced production and income may occur during the transition period, since little or no premium is received during the transition period. Many lending agencies will not lend to a farmer unless he can show that his methods are based on University Extension recommendations, which nearly always include chemical inputs (Wollan 1989). The federal government crop subsidy programs also discourage organic farming practices. There is no provision in the program for the use of green manures as fertilizer or crop rotation for pest control (practices common to organic farming).

Despite these barriers, an increasing number of farmers are willing to produce for the organic market. These farmers must be assured of present and future markets for their commodities to obtain operating loans and ensure a profit for their efforts. Increased supply at the farm level is pushing marketing channels beyond capacity, decreasing prices at the farm gate.

Organic farmers need information on the location and size of organic markets and how to access them. Organic food marketing channels, both domestic and foreign, must be expanded to allow further increases in the supply of these products to meet the increased demand at the wholesale and retail levels.

Organic producers are meeting consumer demand through product differentiation. They are raising products different from other producers, both domestic and abroad. Effectively responding to the global challenge is essential to maintain and enhance global competitiveness; create rural investment opportunities; increase employment opportunities by diversifying the rural economic base; and assist communities, businesses, and families with economic transition (Hubbard 1990).

The Northern Plains

The Northern Plains (namely North Dakota, South Dakota, and Minnesota) with its clean air and unpolluted environment may hold a comparative advantage in production of organically raised crops. North Dakota has more certified organic acres than any other state (Armstrong, Bentley, and White 1990). The ability of the Northern Plains to contribute to this market is suggested by the large number of organic farmers and certified organic acres. A number of organic commodity buyers, located primarily in Minnesota and South Dakota, are purchasing products raised in the Northern Plains area.

Certification

As markets grow, so does the distance between the farmers, wholesalers, processors, and retailers. Greater distances increase the cost of certification and record keeping. To ensure a consistent definition, the Organic Produce Task Force (OPTF) agreed to the following definition of organic at the United Fresh Fruit and Vegetable Association's July 1989 meeting. The National Association of State Departments of Agriculture adopted this definition and used it to develop the organic certification title of the 1990 Food and Agriculture Act (Lynch 1991).

- Organic food production systems are based on farm management practices that replenish and maintain soil fertility by providing optimal conditions for soil biological activity.
- Organic food has been determined by an independent third-party certification program to be produced in accordance with a nationally approved list of materials and practices.
- Organic food is documented and verifiable by an accurate and comprehensive record of the production and handling system.
- Only nationally approved materials have been used on the land and crops for at least three years before harvest.
- Organic food meets all local, state, and federal regulations governing safety and quality of the food supply.

The Organic Foods Production Act of 1990 (OFPA) was passed, as part of the Food and Agriculture Act of 1990, to establish national standards for the production, marketing, and interstate commerce of organically produced foods. OFPA requires the Secretary of Agriculture to establish an organic certification program for producers and handlers of agricultural products (Eilers 1991).

In 1989, Barney McClure, while writing about organic produce in Supermarket News, stated that although the adoption of a definition for organic was a start toward legitimizing the production and distribution of organic food, other problems have not been determined even on a state level. Practical problems need to be solved for U.S. supermarket operators to establish regular organic sections in their produce departments. These problems fall into several categories:

1. Supply - The availability of even the most basic items was sporadic. The promotion of generic departments at a profitable level required that a number of products be available year-round.

2. Variety - Shelf space limited variety. The best organic department had room for as many as 30 to 35 items, when a fully stocked organic food department could have 10 times that many items.

3. Price - Supermarkets with extensive experience with organic foods said that about a 10 cent-per-pound premium is the most they could charge if they wanted a reasonable volume of sales.

4. Margin - The markup on organic foods was frequently held to the same level or a slightly higher level than that of regular produce. This made the entry cost high because it takes time (and a lot of organic merchandise is ending up in the trash bin) before a profitable volume can be achieved.

5. Customer acceptance - Although surveys of customers showed that a substantial number of people would prefer to buy and consume organic produce, this stated desire is not necessarily reflected in actual purchases once the product is available. Appearance and price are undoubtedly responsible for the gap between intentions and actions.

The 1989 Alar scare brought organic food to the forefront of consumer and supermarket produce thinking. Many major chains, who were experimenting with small organic produce sections, were now looking to expand these operations if and when sufficient, certified product was available at reasonable and acceptable prices. It should be recognized that it takes years, even decades, to develop varieties of produce that can be grown without the use of chemicals to protect from disease and insect damage. For certain other products, the initial per acre yield is less when adopting practices that reduce the use of chemical fertilizers and other chemicals, unless proper transitional rotation strategies are used. In many production areas, the land requires years of special preparation before it can be a practical environment for producing organic food economically (McClure 1989).

In a report on U.S. Organic Producer Marketing Cooperatives (OPMC), cooperative managers (Borst 1991) and a Georgia economist [Chung L. Huang (*Choices* 1991)] listed challenges for the organic foods industry in the 1990s. Although these are in reference to organic produce, the challenges are similar for the organic grain industry.

1. The establishment of a national certification system - Such a system must have high enough standards to uphold the norms of the industry and to prevent fraudulent labeling yet must have practical standards with which organic growers can comply and still be economically viable.

2. Retailer education - Many individuals in the organic foods industry believe that retailers from supermarket chains and other stores not familiar with merchandising organic products do not know how to properly handle them. This has resulted in lost sales and dissatisfied customers and retailers. With proper handling, organic produce could be more competitive and marketable among food retailers.

3. Consumer education - The OPMC managers believe that once consumers are informed about the benefits of organic products, demand will increase for such products. Consumers should have tips on selecting and storing such produce.

4. Small-scale grower viability - Some managers assert that the organic foods industry should maintain its small-scale farm structure and avoid going the way of conventional agribusiness, which relies upon large-scale farm production and long-distance shipping.

5. Pressure from agribusiness - As organic foods become more popular and as consumers become more aware of food safety and environmental issues, conventional farmers and agribusiness input suppliers are becoming more defensive. Some farmer groups and commodity associations already have placed advertisements and media campaigns challenging the environmental and food safety claims of organic growers.

6. Large quantity/high quality production - Organic growers must produce large volumes of consistently high-quality, competitively priced commodities to attract mainstream, conventional retailers.

7. Organic production research - Research could overcome or alleviate many of the production and marketing problems in organic agriculture. Most public and private funds for agricultural research, however, are being spent on projects related to problems with conventional, chemical-intensive agriculture. Problems related to organic agriculture are starting to receive attention. Federal funding through the Low-Input Sustainable Agriculture (LISA) program and some state government efforts are channeling some funds to organic agriculture.

8. Political support for organic agriculture - To get a national organic standards and certification program, increased funding for production and marketing research, and other favorable legislation, the organic foods industry must work to maintain or expand its political support.

OBJECTIVES

1. To document the major markets for organically raised wheat, sunflower, and oats domestically and internationally.

2. To determine current and potential supplies of organic wheat, sunflower, and oats in the Northern Plains area.

3. To determine market constraints that wholesalers and retailers perceive for Northern Plains organically raised wheat, sunflower, and oats.

4. To draw some implications to improve the marketing of Northern Plains organically raised wheat, sunflower, and oats and future market development.

METHODS

Surveys of organic commodity producers, buyers and processors, and wholesalers and retailers in the region were conducted to determine the domestic and foreign markets for organically raised wheat, sunflower, and oats. These same groups were questioned about their present and future needs and problems they have encountered or anticipate in the future. Wholesalers and retailers of organic foods were asked to identify marketing constraints they encounter at their level of the marketing hierarchy. The marketing channels and constraints within these channels were determined from these interviews.

Producers

Northern Plains organic crop producers were surveyed to determine their crop output, production potential, and perceptions of the constraints in the marketing channels. Farmers attending winter meetings of the Organic Crop Improvement Association (OCIA) in North Dakota and South Dakota and the annual meeting of the Northern Plains Sustainable Agriculture Society (NPSAS) were surveyed. A mail survey of organic farmers listed as wheat, oats, and/or sunflower growers in the Minnesota Organic Food Directory was used to survey Minnesota farmers (MINN) not completing surveys at OCIA or NPSAS meetings. Total population and dual memberships of Northern Plains organic farmers were determined, using mailing lists from NPSAS, ND-OCIA, SD-OCIA, and Minnesota Organic Food Directory organic farmers who raised wheat, oats, and sunflower. Thirty-two NPSAS farmers responded to the survey, while 32 North Dakota OCIA (ND-OCIA), 8 South Dakota OCIA (SD-OCIA), and 13 MINN farmers responded (Table 1). Farmers were sorted by state from the membership lists for analysis by state. According to membership lists, 137 organic farmers belonged to one or both certification agencies in North Dakota, 58 in South Dakota, and 63 in Minnesota.

TABLE 1. FARMER ORGANIZATIONAL MEMBERSHIP AND COMPLETED SURVEYS BY ORGANIZATION AND STATE, 1992

Organization	State			Total
	North Dakota	South Dakota	Minnesota	
NPSAS				
Completed surveys	20	10	2	32
Membership	83	48	15	146
ND-OCIA				
Completed surveys	30	1	1	32
Membership	71	1	1	73
SD-OCIA				
Completed surveys	0	8	0	8
Membership	0	13	0	13
Minnesota Organic Farmers				
Surveys	0	0	13	13
Membership	0	0	47	47
Total completed surveys	50	19	16	85

Buyers and Processors

Buyers and processors surveyed were selected from the NPSAS Membership Directory, Minnesota Organic Food Directory, OCIA corporate members, referrals from other buyers and processors, and those listed as buyers on the producers' survey. These buyers, processors, and buyer/ processors were surveyed by telephone in the spring of 1992. Eighteen buyers and processors completed the interviews.

Distributors and Retailers

Distributors and retailers were selected using the same procedure as buyers/processors plus the U.S. Natural Foods Retailers listings found in the North Dakota State University Library Online Corporate Database. They also were surveyed by telephone during the spring of 1992. All survey instruments are included in Appendix A.

RESULTS

The first section includes current and potential demand for organic products. The second section consists of current and potential supply of organic wheat, oats, and sunflower in the Northern Plains region. The third section includes producers' and buyers'/processors' responses to marketing constraints, marketing experiences, and suggested ways to increase demand. Also included in the third section are distributors' and retailers' sales problems and suggestions to increase demand for organic products.

Demand

Northern Plains organic producers were asked to list organic commodity buyers for their 1991 organic crops and the states where they delivered their crops. Eighteen buyers were listed from nine states. A list of buyers is included in Appendix B. Buyers and processors were asked where they sourced organic crops and geographic location of their markets for processed products.

Current Demand

Producers reported delivering crops into nine states and Canada in 1991. South Dakota, Minnesota, and North Dakota were the predominant states where organic crops were delivered, but some crops were delivered out of the region. Depending on the purchasing agreement, a small number of producers reported some crops loaded at the producer's farm. Buyers surveyed reported buying wheat from seven states, oats from seven states and Canada, and sunflower from six states. They purchased most of these commodities from North and South Dakota. Markets for processed organic products included the U.S. West Coast, East Coast, Midwest; Europe; Southeast Asia; Canada; Australia; and Japan. The European markets were especially strong for sunflower products, although many wheat and oat products also were sent to Europe.

Potential Demand

Buyers and processors suggested that potential for increased demand for organic products lies in the European and Southeast Asian markets. Most thought that a single company would have a difficult time entering the oriental markets. They added that U.S. markets on the East Coast, West Coast, and Midwest areas held potential for increased demand as consumer awareness of organic food increased. Some processors were experiencing increased competition from European producers for the European organic markets.

Supply

This section presents data on the current and potential supply of organically raised wheat, oats, and sunflower in the Northern Plains.

Current Supply

Estimated total acres owned, farmed, and certified organic for organic farmers in the Northern Plains are listed in Table 2. Estimated total acres were calculated by multiplying average acres for farmers completing the survey (Table 1) by the total number of organic farmers in each state belonging to the listed groups.

TABLE 2. AVERAGE AND ESTIMATED TOTAL ACRES FARMED, OWNED, AND CERTIFIED ORGANIC FOR NORTH DAKOTA, SOUTH DAKOTA, AND MINNESOTA ORGANIC FARMERS, BY ORGANIZATIONAL MEMBERSHIP AND STATE, 1991[a]

	Number of Farms (N)	Owned	Farmed	Certified Organic
		acres		
North Dakota	137			
Average		648	990	783
Estimated total		88,758	135,573	107,281
South Dakota	58			
Average		642	877	697
Estimated total		37,208	50,846	40,436
Minnesota	63			
Average		291	437	356
Estimated total		18,352	24,502	22,428
Total		144,318	210,291	170,145

[a]Note--Number of completed surveys: North Dakota n=50, South Dakota n=19, Minnesota n=16.

Crop Acreage

Farmers were asked to list the number of acres of wheat, oats, sunflower, and other crops raised in 1991. Average acres per farm, estimated total acres, and yields for organic wheat, oats, sunflower, and other crops raised in the Northern Plains in 1991 are shown in Table 3.

The farmers were asked for the percentage of their 1991 crop for which they received organic premiums when marketed. Farmers growing organic wheat indicated they received a premium when marketing nearly one-half of their organic wheat in North Dakota and South Dakota, while Minnesota farmers sold about 26 percent of their organic wheat for a premium (Table 4). Farmers reported selling a higher percentage of their organic sunflower crop for a premium than for their wheat or oats crop.

TABLE 3. ESTIMATED TOTAL ACRES, AVERAGE ACRES, AND YIELDS FOR WHEAT, OATS, SUNFLOWER, AND OTHER CROPS FOR NORTH DAKOTA, SOUTH DAKOTA, AND MINNESOTA ORGANIC FARMERS, BY STATE, 1991

	Crop			
	Wheat	Oats	Sunflower	Other
North Dakota				
Average acres per farm	219	89	82	279
Estimated total acres	29,935	12,213	11,192	38,161
Average yield/acre	23.06 bu	51.87 bu	811 lbs	
South Dakota				
Average acres per farm	223	69	93	338
Estimated total acres	12,915	3,980	5,367	19,603
Average yield/acre	21.27 bu	54.19 bu	673 lbs	
Minnesota				
Average acres per farm	106	56	89	206
Estimated total acres	6,684	3,501	5,627	13,009
Average yield/acre	15.73 bu	54.19 bu	862 lbs	

TABLE 4. PERCENT OF WHEAT, OATS, AND SUNFLOWER CROPS MARKETED AS ORGANIC BY NORTH DAKOTA, SOUTH DAKOTA, AND MINNESOTA ORGANIC FARMERS, 1991

	Wheat	Oats	Sunflower
	---------- percent ----------		
North Dakota	48.71	40.48	83.83
(n)	45	28	10
South Dakota	48.67	38.43	63.55
(n)	11	10	4
Minnesota	25.71	10.74	36.54
(n)	6	8	1

Note: (n)=number of farmers reportedly receiving organic premiums for their crops.

Potential Supply

Farmers were asked if they planned to certify more organic acres in 1992 and 1993 providing the market improved for organic crops. Approximately one-half of the North Dakota farmers responding to the survey indicated they would increase their certified acres by 279 and 298 acres in 1992 and 1993, respectively. Nearly 40 percent of the South Dakota farmers responding would certify more acres but would increase acreage by larger amounts (Table 5).

TABLE 5. PERCENTAGE OF FARMERS PLANNING TO CERTIFY MORE ORGANIC CROPLAND AND AVERAGE INCREASED NUMBER OF ACRES FOR 1992 AND 1993 IN NORTH DAKOTA, SOUTH DAKOTA, AND MINNESOTA, 1991

	1992			1993		
	(n)	Percent of farmers	Number of acres	(n)	Percent of farmers	Number of acres
North Dakota	51	48.5	279	37	50.2	298
South Dakota	17	39.1	298	11	39.6	459
Minnesota	14	38.8	131	11	12.3	54

Farmers were also asked to specify the number of acres of wheat, oats, and sunflower they intended to add if a market were available. Fifty-five to 70 percent of the farmers surveyed would increase acres of organic wheat, oats, and sunflower in 1992 and a similar amount in 1993 (Table 6). These indicate the farmer's willingness to increase crop acres under favorable market conditions for these crops.

TABLE 6. PERCENT OF ORGANIC FARMERS WHO WOULD INCREASE ACREAGE AND NUMBER OF ADDITIONAL ACRES THEY WOULD ADD OF WHEAT, OATS, AND SUNFLOWER FOR NORTH DAKOTA, SOUTH DAKOTA, AND MINNESOTA, 1991

	1992		1993	
	Percent of Farmers	Number of Acres	Percent of Farmers	Number of Acres
North Dakota	69.4		67.0	
Wheat		176		165
Oats		99		91
Sunflower		43		43
South Dakota	62.5		61.9	
Wheat		88		60
Oats		92		79
Sunflower		39		21
Minnesota	54.9		59.5	
Wheat		120		111
Oats		79		72
Sunflower		34		30

Producer Perceptions

Participants in each area of the organic marketing channels were asked for their perceptions of constraints within the marketing chain. Producers also were asked to share marketing experiences. Responses to these questions are summarized below.

Constraints

In the survey administered at meetings and by mail, producers were asked to list their perceptions of marketing constraints. Producers also listed some of the experiences they

encountered when marketing their organic crops and what they thought could be done to increase demand for organic products. Producers' perceptions are discussed below.

The producers stated that the primary marketing constraint was slow movement of crops and slow payment for their commodities. They were concerned about the interest accrued between harvest and 30 to 40 days following delivery of their organic crops. The second constraint was a lack of market contacts. Farmers commented that more legitimate organic buyers were necessary so they could have confidence in the buyers and that the buyers would purchase a product after asking a farmer to plant it. Some farmers feared losing payment for a crop when dealing with a new buyer. They added that because of the small market for some organic products, some buyers were pitting farmer against farmer to buy organic crops at a lower price.

Many producers saw a lack of open communications existed throughout the marketing channels. Some suggested that with good information, producers would have some idea what to plant. Buyers and processors would know in advance what crops would be available. Several producers thought that if communications could be improved, the markets would become more stable, and a more reliable supply would become available. This would assure producers that grains that fit into a cropping rotation necessary for their farm would be in demand.

Many indicated that oversupply was a major constraint. Producer acceptance of organic farming is growing faster than consumer demand for organic products, slowing movement of organic crops. Producers also stated that consumers did not understand the health concerns of chemicals used in agriculture or organic food production, and that a consumer education program was needed. With consumer education, a sustainable price could be achieved that would assure organic producers a reasonable return to cost of production, management, and labor.

Certain facets of organic marketing were listed as marketing constraints. Some said that more certified processing plants were needed as transportation costs to a certified cleaning plant sometimes negated any premium they received. Some producers listed a lack of knowledge about quality standards and pricing with assurance that a crop would be purchased when it met the quality standards. Still others said that a central marketing organization or pooling arrangement where grain could be collected and graded would stabilize organic marketing in the region and provide a steady supply of uniform quality grain to the marketplace.

Other constraints included a lack of retail outlets, failure to expand domestic markets, USDA failure to fully promote organic foods, and no large-scale commitment to marketing organic foods by major processors and retailers.

Experiences

Producers reported both good and bad experiences with organic buyers. Many experienced slow payment for their grain. Some were not paid. Others reported not knowing which buyers to deal with, their reputations, their ability to pay for organic crops, and lack of faith in buyers. Some, fearing nonpayment, would market their grain on the conventional market when the organic premium was low. Other experiences included buyers not returning calls,

having to send samples to many buyers, having to negotiate their own sales terms, a lack of demand for specific grains, and a need to do a comparative analysis of markets before reaching a marketing decision.

Not all experiences were bad or involved organic buyers. Several producers have been successful in anticipating what products buyers would want, often have verbal contracts that were honored, and enjoyed an organic premium for a number of years.

In general, producers indicated a lack of information on quality standards, shipping, freight, pricing, companies processing grain, when to sell, and insufficient premium to cover costs of production. Some felt that a central clearinghouse would help alleviate some of these bad problems.

Suggestions to Enhance Demand

Producers were asked to list suggestions to enhance demand for organic foods. All suggestions centered on the theme of increased public awareness through education about organic food, their production practices, and ecological benefits from organic production. They said that wholesomeness of organic foods and meals prepared from "scratch" should be stressed and the difference between natural and organic foods defined. Producers suggested that improved consumer education would let consumers know that organic producers can produce products at an affordable price. Some organic farmers thought that sharing visions/ stories with consumers would help them rethink what quality in food really means. Many producers thought that this type of advertising program could be funded by a "check-off."

Other suggestions to enhance demand included improved product availability in supermarkets at competitive prices. They suggested that working with medium and larger sized merchandisers and bringing them into the market would help to meet the needs of the producers and consumers by providing a steady supply of high-quality product. Producers also suggested developing uniform organic standards and increasing the number of millers as ways to increase demand.

Buyer/Processor Responses

Buyers and processors were asked what problems they experienced when buying and selling organic products, what solutions they would propose to some of these problems, and how they thought demand for organic products could be enhanced. The questions were asked in a telephone survey, and additional comments were recorded.

Purchasing Problems

Listed below are problems that buyers/processors encountered when purchasing organic crops.

1. Quality problems -
   - The grain that is purchased has insect damage, which lowers the quality of the grain and the price paid to the farmer.
   - Farmers do not understand the grading system for grain that is purchased for human consumption. This grain has to meet higher standards and, therefore, has higher dockage when cleaned. Complaints arise when a larger amount of dockage occurs compared to grain that is sold for feed at the local elevator.
   - Our survey showed that field bindweed is the most common weed found in organic grain sold to buyers and processors. Some organically raised grain arrives at the processing or cleaning facility with a large amount of weed seed, which increases dockage and is difficult and expensive to remove.
   - A good supply of consistent quality grain is sometimes difficult to find. They realize the farmer has no control over the weather and thought most farmers do their best to raise and deliver a high-quality product.

2. Transportation - Organic grain must be processed in a facility that has been certified to clean organic grains. The distance to these facilities is sometimes so far that the farmer must spend any premium he may receive to transport the grain to such a facility.

3. Companies selling nonorganic grain as organic - Some companies are selling grain that was not raised organically as organic grain. Also grain is being sold as chemical-free that was chemical-free only that cropping year. This alleged practice is not widespread but occurs in the organic food industry.

4. Government regulations - To protect the farmer, a buyer must be bonded and licensed to purchase grain in most states. This is necessary since the owner loses title to the grain and any claim to it once grain has crossed a state line. This procedure is costly and time-consuming.

5. Sampling - Buyers say that, at times, the sample of grain that they received from the farmer does not match the grain that they received. This can occur because of poor sampling procedures and not from an intent to misrepresent the grain.

6. Organic audit process - Additional paperwork is required to track individual lots of organic grain through the marketing channels. Buyers and processors find this to be time-consuming and adds additional cost to the product.

7. Price - Buyers and producers sometimes have trouble establishing a price for the product. Some companies use a base price plus a percentage premium for organically raised grain. It is difficult to reach an understanding on grading standards and discounts.

8. No problems - Some buyers and processors stated that they had no problems and were satisfied with the job their farm clients were doing.

Buyers'/Processors' Proposed Answers to Purchasers' Problems

Summarized below are buyers'/processors' proposed solutions for purchasing problems they encounter.

1. Producer education - Make producers aware of the different grading standards for grain sold for human consumption so that they understand why a greater dockage or clean out occurs for this grade of grain.

2. Sampling techniques - Producers should be knowledgeable about different sampling techniques and how they affect the sample of grain sent to the buyer. Many certification organizations are presenting sampling demonstrations at annual meetings and workshops.

3. Insect control - Insect damage to grain lowers quality and yield. Educate producers about these problems and alternative methods to control insects.

4. Weed problems - Excessive amounts of certain weeds in grain have become a problem. Producers should use on-farm screening or cleaning to remove excessive weeds before storing and selling grain.

5. Pooling - Pooling grain stocks may be helpful in providing a large quantity of high quality grains to the buyer.

Sales Problems

Buyers and processors said they did not encounter many problems when selling processed products. Buyers would only buy when they had a market for the products. Listed below are responses to problems they encountered when selling organic products.

1. No problems - Many buyers and processors had no problem selling the organic products that they processed and only bought grain when they had an order.

2. Price resistance - In tight economic times, the consumer is sometimes unwilling to pay a premium for organically raised products. Higher costs for processing organic grains must be passed onto the consumer.

3. Transportation costs - Increased transportation costs are affecting pricing. Consumers will only pay a certain premium for organic food. Added transportation costs are incurred if a retail outlet is not on a regular route for a distributor. Most distributors are located in more populous areas, so those retailers in less populous areas will probably incur increased shipping costs.

4. Quality - Quality problems are sometimes encountered where the organic grain does not meet the distributor's, miller's, or retailer's standards. Some of these include insect damage or seed size as in the case of sunflower.

5. Accounts receivable - Accounts receivable have been increasing steadily since the recent downturn in the economy. If the distributor, miller, or commercial end user is slow in paying and the buyer is undercapitalized, buyers are unable to pay the farmer in a timely manner.

6. European competition - European producers have entered some of the organic markets that U.S. producers traditionally served, increasing price competition in these markets.

7. Paperwork - Organic buyers/processors have increased amounts of paperwork to organic certification agencies and farm identification papers on grain that have been processed to identify the source of the grain.

Suggestions to Enhance Demand

Ultimately, the demand for organic food should increase when the price for organic food becomes competitive with conventionally raised food. Most suggestions, by buyers and processors, to increase demand with the premise of lowering production and processing costs that should, in turn, lower the price to the consumer--making it more attractive to purchase food raised under environmentally safe conditions. Producers argue that decreased costs should come from beyond the farm gate. Buyers' and processors' suggestions to enhance demand are listed below.

1. Consumer education - When consumers are educated to the fact that organic crops are raised under conditions where no chemicals or synthetic fertilizers are used (conditions conducive to safer environmental conditions), many will be willing to pay a premium for organic crops. Consumer education is necessary to increase a willingness to pay a premium to purchase food that is produced using practices felt to protect the environment.

2. Advertising - Organic foods, like foods raised inorganically, require advertising to increase consumer awareness of the products and the benefits of purchasing organic foods.

3. Lower prices - Lower prices for organic foods may stimulate sales as lower prices may increase demand for any product.

4. Distribution system - An improved distribution system would be advantageous. A steady supply of high-quality organic foods to retailers would increase retailer acceptance and improve demand for producers.

5. Expanded processing capacity - More processors would increase the amount of product available for distributors, retailers, and consumers. This would increase demand at the farm level and provide a more reliable market for producers.

6. Environmental awareness - When the consumer becomes more aware of the environmental dangers from producing food using more conventional practices, he should be more willing to pay organic producers a premium for food raised under organic conditions.

7. National standards for certification agencies - Uniform certification standards would allow for a national organic label under which all products would meet the same production standards concerning the use of pesticides and synthetic fertilizers. Producers have to sell only to processors that are certified under the same certification agency as the farmer. It is sometimes a long distance to facilities that can process his crops. Under national certification standards, all certified processors would have to meet the national certification standards and be allowed to process products from any certified farmer. This would allow more product to enter the market and cut costs by reducing transportation cost of the raw products. This in turn would lower costs to consumers and increase demand for organic products.

8. Farm policy - Policy could be developed to encourage production of organic food with programs like the flex acre programs that allow producers to produce organic crops without losing farm program benefits. More policies like these would allow for a larger supply of safer food for the consumer.

9. Business-like manner - Retailers should market products in a clean, healthful, and business-like manner. The perception of organic food sold in dirty stores by old hippies must be removed.

Distributors'/Retailers' Responses

Wholesalers (distributors) and retailers handle wheat in several forms: flour, whole grain, wheat berries, cracked wheat, wheat pasta, and breads (pita and mixed). Oats is sold as oat groats, meal, granola, flour, and bran. Sunflower is marketed as seeds out of shell, roasted, in soy, and in trail mix.

Retailers do not know the geographic source of the products but know where the processors or buyers work. Retailers did not indicate that they had encountered many problems, but feel that they have selected reputable distributors.

Sales Problems

Problems encountered when selling organic products include consumer resistance to prices and, in some cases, transportation problems. Consumers do not want to pay a premium for organic products when the economy is slow. Delivery of organic products becomes a

problem when the retail outlet is small and not in an area where a large number of deliveries are made. In this case, they have to rely on some local sources and less frequent and larger deliveries from distributors. This can increase inventory costs, which ultimately increases prices to their customers.

Suggestions to Enhance Demand

Consumer education is cited as the chief method for increasing sales of organic products. Many retail outlets display recipes, methods for preparation, and other uses for organic products, much like a traditional grocery store. Retailers feel that as the consumer becomes aware of the chemical-free methods of production, consumers will be willing to pay a premium for organically raised crops.

SUMMARY

Northern Plains organic producers delivered crops to buyers and producers in nine states and Canada in 1991. Organic buyers in the region reported buying wheat from seven states, oats from seven states and Canada, and sunflower from six states. Buyers indicated the greatest potential for increased demand was in European and Southeast Asian regions. They also suggested that the coastal states and Midwest areas of the United States held potential for increased domestic demand.

Estimated certified organic acreage exceeded 170,000 acres in North Dakota, South Dakota, and Minnesota. In 1991, approximately 50,000 acres of organic wheat; 20,000 acres of oats; 22,000 acres of sunflower; and 71,000 acres of other crops were planted. Approximately 50 percent of North Dakota organic farmers, nearly 40 percent of the South Dakota organic farmers, and approximately 20 percent of Minnesota organic farmers indicated they would increase certified acreage in 1992 and 1993 if the markets were favorable.

Regional organic producers said that slow movement of grain and slow payment for crops were the primary constraints to smooth marketing of organic crops. They indicated that improved communications throughout the marketing channels would improve grain movement. They also stated that an advertising program to increase consumer awareness to the health and environmental benefits from organic farming would increase demand for their products. Buyers/processors indicated that quality problems in organic crops was the biggest problem they encountered. They thought that producer education of crop marketing standards would help alleviate their marketing problems, and also that consumer education would improve demand for organic products.

Distributors/retailers reported few problems when sourcing organic products and thought that they have selected reputable distributors. Retailers did not know the geographic source of most of the products they sell. Like the producers, buyers, and processors, retailers agreed that consumer education is the chief method for increasing demand for organic products. They stated that when consumers become aware of the chemical-free methods of production, consumers will

be willing to pay a premium for organically raised crops. Retailers are also using recipes, samples, and other displays to increase sales.

IMPLICATIONS

Increasing demand for organic products is the expressed goal of each member of the organic marketing channel. All participants in the organic marketing chain said that consumer education and product development are the most effective ways to increasing demand in this market. Any changes that can be introduced to stimulate demand for organic foods reflect positively to each participant through increased returns.

Improved communication - An objective of this study was to address marketing constraints participants perceived in each step of the marketing chain. Producers listed slow payment and sometimes nonpayment for products delivered, lack of market contacts, and a lack of communication as problems and experiences that occurred when trying to raise and market their crop. Buyers and processors listed sampling problems and an inconsistent supply of uniform quality grain when purchasing organic wheat, oats, and sunflower. Distributors and retailers stated that they worked with the same suppliers most of the time and had no problems sourcing wheat, oats, and sunflower products.

Consumer education - Certification assures the consumer of purity, quality, and authenticity of the organic foods they are purchasing. Certification paperwork adds extra costs to organic products. The consumer, in most cases, pays a premium for organically grown food because of concern for the environment (Organic Food Business News 1992). Education is needed to provide information to consumers about certified organic foods if demand is to increase. The information should indicate that organic foods are raised under conditions where chemicals or synthetic fertilizers were not used, and conditions which promote a safer, more healthy environment. Supermarkets with an organic foods section and natural foods store report that they are providing free samples of prepared foods, displaying recipes, and have food preparation suggestions for shoppers. But the shopper has to be attracted to the store before demand is affected. Positive advertising is an important part in consumer education.

National certification - A national certification program is suggested as a method to introduce uniform standards for organic food production across the nation. A result of such standards would be meeting or exceeding uniform, minimum certification guidelines for all producers, processors, and others involved in marketing organic products. This may reduce handling and processing costs as more processors and millers handle products in greater quantities that they were not previously certified to handle. Reduced expenses could be passed on to the consumer--lowering organic food prices and increasing demand for these products.

"Organic label" - An "organic label," similar to the "real dairy" label, may be adopted to assure consumers of the safety of the food they are purchasing and remind them that they are contributing to environmental safety. Certification agencies report that monies collected for sales of products under their label is used mainly for administrative expenses. This implies that the paperwork is in place to do a check-off program which could become a source of money to provide consumer education, organic label development, and new product development.

Producer education - At the early levels of the marketing channel, changes that improve farmer access to markets and buyer/processor access to consistent, high-quality supplies of product will ultimately smooth the flow of crops through the marketing channels. Improved communications between producers and buyers/processors is essential to meet this end. Producers must be aware of grading standards, sampling techniques, problems the buyer/processor faces, and production techniques necessary to meet the high standards the organic food market demands. Producers wanted to know what crops will be in demand before planting time, what forward contracts are available, grading standards, price structure, assurance of prompt payment for products delivered, and to receive a fair return for their crops.

New food products - Developing new prepared food products that meet today's demand for quickly prepared foods for working families is an option that should be studied on an individual product basis. Developing a niche market for these products would open the door for adding value and increasing demand for organic food products.

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APPENDIX A

Survey Instruments

Farmers' Survey
Organic Marketing Analysis

This survey is designed to help us identify factors that will improve your abiliity to market organically raised wheat, oats, and sunflower. We will be using this information to determine supply of these grains and recognize marketing constraints in the organic marketing system. All information is confidential and used as part of an overall average. We are requesting that your name is included to avoid duplication and do location analysis. This survey will be administered at other organic producers' meetings.

1. Total crop acres owned in 1991? _____

2. Total crop acres farmed in 1991 (including rented)? _____

3. Total certified organic crop acres farmed in 1991? _____

4. Total 1991 certified acres planted to:

	Acres	Yield
Wheat	_____	_____bu/acre
Oats	_____	_____bu/acre
Sunflower	_____	_____cwt/acre
Other Crops	_____	

5. Do you expect to certify more crop land

	Yes/No	Acres
In 1992?	_____	if so, how many acres? _____
In 1993?	_____	if so, how many acres? _____

6. What percent of your production, in each crop, did you receive an organic premium in 1991?

Wheat	_____%
Oats	_____%
Sunflower	_____%

7. Where did you deliver the crops to that you received a premium on?

8. To whom did you sell them?

9. If additional organic markets for wheat, oats, or sunflower are located, would you increase your acreage of these crops in:

	Yes/no	If yes,	Wheat	Oats	Sunflower
1992	_____	how many acres?	_____	_____	_____
1993	_____	how many acres?	_____	_____	_____

For the following questions, please list as many answers as you can think of (please use back if necessary).

10. **What do you think are the major constraints in moving organic products through marketing channels?**

11. **Please list personal experiences of difficulties in marketing organic products.**

12. **What farm inputs do you have to go out of state to purchase (machinery, fertilizer, seed, etc)?**

13. When purchasing inputs for organic production, what problems do you experience?

14. What other organic products do you have to go out of state to purchase (food, etc.)?

15. Do you have any suggestions as to how these can be supplied within the state?

16. In what ways do you think that demand for organic grains could best be increased?

Thank you very much for completing the survey. Again, all information collected will be used for research purposes and no information will be traced to individual farms.

Name _____
Address _____
_____

Buyer/Processors Survey
Organic Marketing Analysis

Company_____

Contact Person_____

Address_____

_____

Telephone_____

1. Do you buy grain directly from the producer, or through a buyer?

2. From what geographic areas do you purchase most of your:

   Wheat:

   Oats:

   Sunflower:

3. When you are buying organic grain, what are the biggest problems that you encounter?

4. What could producers in the Northern Great Plains do to better meet your needs?

5. What do you think farmers in the Great Plains, the universities, and state or federal officials can do to help move the organic grain to wholesalers and retailers?

6. Where do you sell you products? Retail or Wholesale outlets, direct to consumer?

7. When you are selling organic grain products, what are the biggest problems that you encounter?

8. What geographic areas do you think holds the greatest potential for increased demand for organic grains?

9. What can be done to enhance demand for organic grains?

NOTES:

Wholesaler/Retail Outlet Survey
Organic Marketing Analysis

Company_____

Contact Person_____

Address_____

_____

Telephone_____

1. Do you handle wheat or wheat products? In what form?

2. When you are buying organic wheat and wheat products, what are some of the biggest problems that you encounter?

3. Do you handle oats or oat products? In what form?

4. When you are buying organic oats and oat products, what are some of the biggest problems that you encounter?

5. Do you handle sunflower or sunflower products? In what form?

6. When you are buying organic sunflower and sunflower products, what are some of the biggest problems that you encounter?

7. Where do you buy these grain products from? (Geographic area or specific companies)

8. Where is the geographic location of most of your markets?

9. When you are selling organic grain products, what are some of the biggest problems that you encounter?

10. What geographic areas do you think holds the greatest potential for increased demand for organic grains?

11. What do you think can be done to enhance demand for organic grains?

NOTES:

APPENDIX B

Organic Buyers

Organic Buyers

Agri-Trading Corp
P.O. Box 609
Hutchinson, MN 55350
612-587-2133

Arrowhead Mills
P.O. Box 57645
Hereford, TX 79045
806-364-0730

Country Grown Foods
P.O. Box 2458
Dearborn, MI 48123
402-854-2576

Dunn International
4735 Sergeant St
Waterloo, IA 50701
319-233-5504

Eden Foods
701 Tecumseh Road
Clinton, MI 49236
313-973-9400

Little Bear Trading Co
226 - 2nd Street East
Winona, MN 55987
507-452-6332

Living Farms
P.O. Box 50
Tracy, MN 56175
800-533-5320

Mercantile Foods
P.O. Box 1140
Georgetown, CT 06824
203-544-9891

Natural Way Mills
Route 2, Box 34
Middle River, MN 56737
218-222-3677

Organics Plus
Schwitters Seeds, Inc
P.O. Box 102
Raymond, MN 56282
612-847-3675

Pine International
P.O. Box 1107
Lawrence, KS 66044
913-841-6016

Purity Foods
Suite 21
4211 Okemos Road
Okemos, MI 48864
517-351-9231

Red River Commodities
P.O. Box 3022
Fargo, ND 58108
701-282-2600

Roman Meal
P.O. Box 1107
Fargo, ND 58107
701-282-9656

Sigco Sun Products
P.O. Box 331
Breckenridge, MN 56520
1-800-654-4145

Specialty Grain Company
Route 1, Box 163
Marquette, NE 68854
402-854-2576

Swany White Mill
314 7th Street East
Freeport MN 56331
612-836-2174

Terra Prima
221 Monroe Street North
Hudson, WI 54016
715-381-1336