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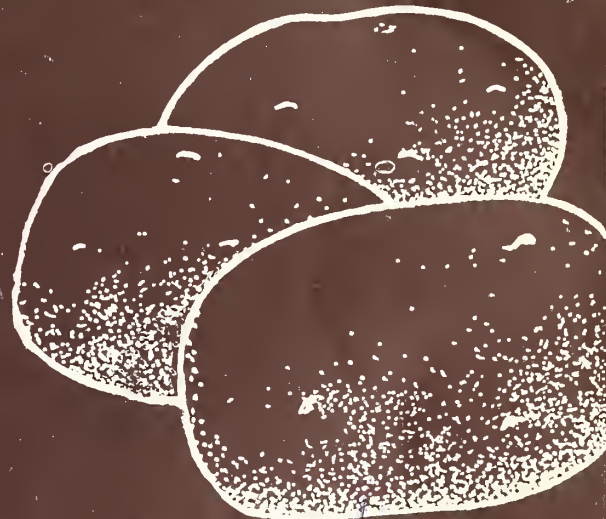
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RED RIVER VALLEY POTATO GROWERS PROFILE & ECONOMIC CONCERNS



Service Report 139
Farmer Cooperative Service
U.S. Department of Agriculture

#1273/79

PREFACE

Distressed economic conditions for potato growers in the Red River Valley prompted requests to Farmer Cooperative Service (FCS) for a survey and analysis.

There were other concerns akin to the economic situation. As borne out subsequently in the FCS study, growers were uneasy about overproduction, their rules of traditional independence, and dominance in the potato industry by dealers and processors.

The survey was developed to collect an adequate cross section of the valley's industry in 1972. These data are used to determine possible relationships and any trends of factors related to the problems. The survey also was designed to obtain perspectives of the potato growers.

A 10-percent sampling of potato growers provided 119 responses. Data included age, acreage, education, gross farm sales, concerns, solutions, marketing channels, and uses of products.

Appreciation is expressed to agricultural economist John M. Bailey for his contribution to the research methodology and Howard W. Mobley and Lila J. Walker for their collaboration in the original writing of the report.

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HIGHLIGHTS AND COMMENTS

A composite of averages in this survey shows the Red River Valley potato grower most likely farmed 308 acres of potatoes, finished high school, is between 35 and 54 years old, and grossed less than \$100,000 a year. He is concerned mostly about potato overproduction.

Relationship studies show:

- Those growers with high school education or higher generally operated larger acreages.
- The 35 and older growers dominated large-acreage farms.
- The three acreage groups (small, medium, large) marketed in similar proportions to fresh sales, seed, and processed outlets.
- As acreages increased, growers found it more necessary to secure outlets with processors.
- Younger growers were more likely to be selling their potatoes to processors.
- Older growers were more likely to be selling their potatoes to fresh markets.

Uppermost concerns voiced by farmers were those of overproduction, their independence, and the economic domination of the potato industry by dealers and processors. These were selected from 11 possible problems and any others the interviewees listed. Growers had opportunity to list them in order of importance.

Various proposals were discussed in the interviews as possible means of improving the economic condition of the Red River Valley potato industry on both short-term and long-term bases.

The solutions preferred were:

1. A marketing agreement and order, preferably national in scope but area-wide if the other were impossible.
2. Bargaining efforts to be continued.
3. Cooperatives--either expansion of existing associations or development of new ones.

It is evident from responses that a favorable two-thirds vote for a marketing agreement would not be secured unless an educational campaign was effectively conducted. Support exists for further effort in bargaining by a growers' committee even though past efforts had not met with great success. The recorded vote and informal expression indicated growers still wished to continue bargaining efforts.

Third in order of possible solutions to potato industry problems in the Red River Valley was expansion of cooperative activity either through existing organizations or by establishing new cooperative marketing facilities. Only favorable comments were made about Associated Potato Growers, the largest marketing cooperative operating in the Valley.

That there was not stronger support for marketing cooperatives was noted in view of the long history of agricultural cooperatives in North Dakota and Minnesota. Noted also were the 14 growers who voted "No" to any cooperative program.

One-quarter of the growers interviewed expressed concern about the quality of Red River Valley potatoes. That there was not more concern expressed is surprising in view of the general recognition of the problem of securing good delivery of good quality.

2007

RED RIVER VALLEY POTATO GROWERS;

Profile and Economic Concerns [Management],

Frank W. Hussey
Cooperative Development Specialist

POTATOES' PLACE: IN VALLEY, IN NATION

Red River Valley, encompassing five counties on North Dakota's side and five on Minnesota's side, is one of the major potato production areas of the United States. In 1971, the valley produced 11.5 percent of the Nation's late-season potato crop.

Minnesota's share then was 5.2 percent and North Dakota's share was 6.3 percent. Minnesota production in the valley amounted to 81 percent of the State's late-potato volume. North Dakota's five counties provided 96 percent of that State's volume.

The valley, once covered by Lake Agassiz, is fertile land. This makes it ideal for field and grain crops. Potatoes represent only about 5 percent of the valley's output for all crops.

THE GROWERS: PROFILES AND PATTERNS

Some 1,200 farms in Red River Valley produce potatoes. A representative one-tenth of those were polled in a survey, on which profiles and relationships in this report are drawn.

The survey shows more than 80 percent of potato growers' farms had fewer than 500 acres in potatoes.

Groupings in table 1 indicate about 39 percent of all farms in the survey fall in the small size group (below 200 acres). The average farm in this group was 105 acres. The range was from 7 acres to 195 acres.

The medium class, 200-499 acres, included about 43 percent of all farms. Size ranged from 200 to 485 acres; the average was 308 acres.

Thus, small and medium class farms included nearly an equal number of growers. Together they accounted for 80 percent of the total farms involved in potato production.

The group of largest farms, those with 500 or more acres in potatoes, totaled 21. Acreage sizes ranged from 500 to 1,450. This farm size accounted for 18 percent of the total. Average farm size in this group was 706 acres.

Table 1--Potato acreage categories

Size and number : of acres :	Farms : Number :	Proportion : of total : Percent	Range in : acreage : Number	Average : acreage : Number	Medium : acreage : Number
Small: Under 200	47	40	7 - 195	105.2	110
Medium: 200 - 499	51	43	200 - 485	307.1	300
Large: 500 and over	<u>21</u>	<u>17</u>	500 - 1450	706.0	580
Total	119	100			

Education Levels--Acreages

Growers with high school education or higher generally operated larger acreages of potatoes (table 2).

Of the 119 growers interviewed, 30 had less than a high school education while nearly the same number--27--had received more than high school training. Thirteen farmers reported receiving some high school education. The greatest number--49--completed 4 years of high school.

The 17 farmers reporting the smallest acreage represented 57 percent of those with less than high school education. There were only two with less than high school training who had farms in the largest acreage class.

Of the 76 with high school education or higher, 53 were in the two larger acreage groups. Of 30 with less than high school education, only 13 were in the 200-acre category.

Age--Acreages

Farmers 35 to 54 years of age were dominant in the survey, and they held the bulk of the larger acreages (table 3).

Table 2--Potato acreage related to educational levels

Size and number of acres :	Farmers Number	: Less than : high school		: Some : high school		: Four years : high school		: More than : high school	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Small:									
Under 200	47	17	36	7	15	15	32	8	17
Medium:									
200 - 499	51	11	22	6	12	20	39	14	27
Large:									
500 and over	21	2	10	0	0	14	67	5	23
Total	119	30	25	13	11	49	41	27	23

Only 17 farmers of the 119 interviewed were under 35 years of age. Conversely, more than 85 percent of the farmers were 35 years old and older.

At the 45-year-old mark, older and younger farmer percentages were more equal. Those 45 and older comprised about 55 percent of the total.

Large farms were owned almost exclusively by farmers 35 and older.

Table 3--Relationship of potato acreage to age of growers

Size of : farm :	Number : of farmers :	Years of age			
		Under 35 :	35 - 44 :	45 - 54 :	55 and over
Small	47	6	9	18	14
Medium	51	9	19	13	10
Large	<u>21</u>	<u>2</u>	<u>6</u>	<u>8</u>	<u>5</u>
Total	119	17	34	39	29

Gross Sales--Acreages

Although some exceptions were found, there was a definite overall consistency between acreage size of potato operation and total gross sales (table 4). Gross sales figures reflected all of a farm's products--potatoes plus crops such as sugarbeets, wheat, barley, oats, soybeans, and sunflowers.

Of the 44 growers in the smallest potato acreage class, 26, or 59 percent, had gross sales of less than \$50,000 and 14, or 32 percent, had gross sales of more than \$50,000 but less than \$100,000. Only three of that group of 44, or 7 percent, had sales between \$100,000 and \$150,000; only one had a volume of more than \$150,000.

The medium group of 51 farmers with acreages ranging from 200 to 499 acres showed 22, or 43 percent, with gross sales between \$150,000 and \$100,000. Seventeen, or 33 percent of farmers, had a gross volume between \$100,000 and \$150,000. Only seven, or 14 percent, had sales of less than \$50,000 and five, or 10 percent, of more than \$150,000.

Twenty farmers had 500 acres or more; 17, or 85 percent, reported gross sales of \$150,000 or more. The largest farm in the survey was 1,450 acres.

There were 71 (62 percent) farmers in the study who reported sales under \$100,000. The remaining 44 were about equally divided in the two upper gross sales groups.

Table 4--Relationship of potato acreage to gross sales

Size and number of acres	Number : of farmers	Under : \$50,000		\$50,000 - : 99,999		\$100,000 - : 149,999		\$150,000 - : and over	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Small: Under 200	44	26	59	14	32	3	7	1	2
Medium: 200 - 499	51	7	14	22	43	17	33	5	10
Large: 500 and over	20	0	—	2	10	1	5	17	85
Total	*115	33		38		21		23	

* Figures on sales volume were not disclosed by 4 farmers interviewed.

Potatoes' Use--Acreages

Distribution of sales to the three marketing outlets--fresh, processed, and seed-by ~~small~~, medium, and large potato acreage groups was uniform.

Though the total sales of the three groups were evenly distributed, 19 smaller growers marketed most of their crop through fresh channels. Ten small growers sold to processors, and 17 sold to the seed trade (table 5).

In the medium acreage group of 49 farmers, 19, (39 percent) moved their crop to processors. The same trend was evident among the group with 500 to 1,450 acres. One-third sold potato crops to fresh outlets, and 11, or 61 percent, moved to processors, and only 1 had a seed market. One can therefore infer that larger growers depended chiefly on processing outlets while smaller growers were more interested in the fresh market and seed trade.

Table 5--Relationship of acreage to principal use of potatoes

Size and member of acres	: Farmers : in : groups	: Farmers selling: : for fresh use	: Farmers sell- : ing for pro- : cessed use	: Farmers selling : for seed use			
	<u>Number</u>	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Small under 200	46	19	41	10	22	17	37
Medium 200 - 499	49	12	24	19	39	18	37
Large 500 and over	<u>18</u>	<u>6</u>	<u>33</u>	<u>11</u>	<u>61</u>	<u>1</u>	<u>6</u>
Total	*113	37	33	40	35	36	32

*6 growers did not have a principal use; their potatoes went to all three outlets equally.

Education--Age

Of farmers under 35 years, none had less than high school education, and about half (9 of the 17) had more than a high school education (table 6).

The education trend in the two older groups, particularly farmers 55 and over, showed the reverse; only 3 of 29 had more than a high school education.

In the age group, 35 - 44, 56 percent completed their high school education.

Table 6--Relationship of schooling and age of potato farmers

Age of farmers	: Number : of : farmers	Educational levels			
		:Less than :high school:	: Some high : school	: High School	:More than :high school
Under 35	17	0	1	7	9
35 - 44	34	4	2	19	9
45 - 54	39	15	7	11	6
55 and over	<u>29</u>	<u>11</u>	<u>3</u>	<u>12</u>	<u>3</u>
Total	119	30	13	49	27

Education--Gross Sales

The survey showed a direct correlation between education levels and gross sales. Thirteen farmers with less than high school education had gross sales under \$50,000 (table 7). Those with some high school education totaled only 10 percent of the farmers interviewed and were evenly distributed in the first three groups of gross income, but only one reported gross income of more than \$150,000.

The largest group, 47, with 4 years of high school education, representing 41 percent of the total interviews, showed a remarkably uniform distribution among the four gross sales groups.

Nearly as many farmers had more than a high school education as those who had less than a high school education--27 vs. 29. Only four growers with less than \$50,000 gross income had more than a high school education.

Table 7 shows that education "pays off," because 13, or 45 percent, of the growers with less than a high school education had gross sales of less than \$50,000, while four in the group with some high school education, or 33 percent, had incomes of less than \$50,000. The proportion of farmers with gross sales of less than \$50,000 continued to decline as education increased. In the educational level of 4 years of high school, 26 percent of farmers had gross sales of less than \$50,000, and for those with more than high school, only 15 percent had less than \$50,000 in sales.

A comparable relationship is shown when measured by gross sales of \$150,000 and over. No more than 10 percent of the farmers with some or less than a high school education had incomes of \$150,000 or over, while about 25 percent with high school or more had gross sales in the high category. Hence, the odds were only 1 in 10 that a farmer with less than a high school

Table 7--Relationship of educational levels to gross sales

Level of education	Gross sales									
	Farmers		Under \$50,000		\$50,000 - \$99,999		\$100,000 - \$149,999		\$150,000 and over	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Less than high school	29	25	13	45	9	31	4	14	3	10
Some high school	12	10	4	33	4	33	3	25	1	9
4 years high school	47	41	12	26	12	26	11	23	12	25
More than high school	27	24	4	15	13	48	3	11	7	26
Totals	*115		33		38		21		23	

*Figures on sales volume were not disclosed by 4 farmers interviewed.

education could expect gross sales of \$150,000 or more but 1 in 4 for those with high school or more.

Education--Potatoes' Use

In the group with less than a high school education, sales were divided between the fresh market and seed outlets (table 8). Only four, or 14 percent, sold most of their crop to processors.

Only a small group, 12, had some high school training. Their sales were mainly to processors-46 percent.

The largest group, those with high school education, recorded more sales to fresh outlets.

The group with more than a high school education sold mainly to processors.

When farmers with high school education or more were grouped together, a significant trend resulted toward marketing more of their crops to processors. The results indicate 42 percent for processing, 27 percent as seed, and 31 percent to fresh markets.

Table 8--Relationship of education levels to principal use of potatoes

Level of education	Number of farmers	Percent		Fresh		Processed		Seed	
				No.	Pct.	No.	Pct.	No.	Pct.
Less than high school	29	26	12	41	4	14	13	45	
			} 36%			} 24%		} 40%	
Some high school	13	11	3	23	6	46	4	31	
4 years high school	46	41	16	35	19	41	11	24	
			} 31%			} 42%		} 27%	
More than high school	<u>25</u>	<u>22</u>	<u>6</u>	<u>24</u>	<u>11</u>	<u>44</u>	<u>8</u>	<u>32</u>	
Totals	*113		37	33	40	35	36	32	

*6 growers did not have a principal use; their potatoes went to all 3 outlets equally.

Age--Gross Sales

Four age groupings were made of the farmers interviewed.

The youngest group--under 35 years--number 17, or 14.8 percent, while the oldest group--55 years and above--number 27, or 23.5 percent of the total (table 9).

The other **two** age groups, nearly equal in number, represented a total of 71, or 62 percent of farmers interviewed. It was a coincidence that the same number, 71, or 62 percent of all farmers in the study, reported sales of less than \$100,000. The rest were about equally divided in the **two** upper gross-volume groups--\$100,000 to \$149,999 and \$150,000 up.

Table 9--Relationship of age of farmers to gross sales

Age	: Farmers	: Under		: \$50,000 -		: \$100,000 -		: \$150,000	
		: \$50,000		: 99,999		: 149,999		: and above	
	Number	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Under 35	17	6	35	9	53	2	12	0	
35 - 44	34	7	21	10	30	9	26	8	23
45 - 54	37	14	38	9	24	4	11	10	27
55 and over	<u>27</u>	<u>6</u>	<u>23</u>	<u>10</u>	<u>37</u>	<u>6</u>	<u>23</u>	<u>5</u>	<u>17</u>
Total	*115	33		38		21		23	

*Four farmers did not provide gross sales figures.

Age--Potatoes' Use

For the 113 farmers specifying a major outlet, a striking uniformity of distribution was found among fresh, processed, and seed markets--33, 35, and 32 percent, respectively (table 10).

However, marked differences appeared among the age groups. Of those under 35 years of age, none had sold a major part of their crop to the fresh market, while 13, or 76 percent, sold to processors and 4, or 24 percent, sold to seed buyers. Of the next age group (35-44 years), 13, or 43 percent, sold on the fresh market; 17 were about equally divided between processed and seed outlets.

In the oldest group, those 55 and over, 11, or 42 percent, moved the larger part of their crops for seed, suggesting that a seed trade had been built

over the years by the older farmers.

At least two-thirds of the volume was sold for one use to be counted as a principal use. Six of the 119 farmers interviewed divided sales with no major sales outlet indicated.

Table 10--Relationship of age to principal use of potatoes

Age	: Farmers	: Proportion	Fresh	:	Processed	:	Seed	
	<u>Number</u>	<u>Percent</u>	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>	<u>No.</u>	<u>Pct.</u>
Under 35	17	15	0	--	13	76	4	24
35 - 44	30	27	13	43	9	30	8	27
45 - 54	40	35	16	40	11	28	13	32
55 and over	<u>26</u>	<u>23</u>	<u>8</u>	<u>31</u>	<u>7</u>	<u>27</u>	<u>11</u>	<u>42</u>
Total	*113	100	37	33	40	35	36	32

*6 growers did not have a principal use; their potatoes went to all 3 outlets equally.

Gross Sales--Potatoes' Use

Of 32 growers with gross sales of less than \$50,000, just half sold the major part of their potato crop to fresh sources (table 11). Of the other half, seven sold largely to processors and nine to seed buyers.

In the next volume group--\$50,000 to \$99,999--nearly half of growers interviewed--17, or 47 percent--sold largely to processors; a third sold their crops mostly as seed, leaving only 7, or 20 percent, selling in fresh markets.

In the third group, with gross sales of \$100,000 to \$149,999, sales were evenly distributed among the three outlets, but the total number in that class represented only 18 percent of the whole.

The group with the largest volume of sales included a relatively small number of growers, 21, or 19 percent. Nine farmers in that group sold to processing outlets, seven sold largely to fresh outlets, and five sold largely to seed buyers.

Four growers did not report their gross sales. These, in addition to 6 who distributed sales more or less equally among the three outlets, left a total of 109 to evaluate.

Table 11--Relationship of principal use of potatoes to gross sales

Gross sales	Farmers	Proportion	Fresh	Processed	Seed			
	Number	Percent	No.	Pct.	No.	Pct.	No.	Pct.
Under \$50,000	32	30	16	50	7	22	9	28
\$50,000-\$99,999	36	33	7	20	17	47	12	33
\$100,000-\$149,999	20	18	7	35	6	30	7	35
\$150,000 and over	<u>21</u>	<u>19</u>	<u>7</u>	<u>33</u>	<u>9</u>	<u>43</u>	<u>5</u>	<u>24</u>
Total	*109	100	37	34	39	36	33	30

*4 growers did not report their gross sales. 6 growers did not have a principal use.

ORGANIZATIONS SERVING VALLEY GROWERS

The Red River Valley potato grower has the farmer cooperative technique available as a resource. Principal grower organization designed to serve all potato growers in the area is the Red River Valley Potato Growers Association. Membership is directly related to compliance with the assessment of 1 cent per hundredweight. This applies to both Minnesota and North Dakota growers.

Payment of the fee is compulsory, but the grower has the privilege of requesting return of the fee. Requests for this return vary to some extent with the financial results of the preceding year. Encouraging, however, is the fact that funds have been quite stable from year to year. This makes it possible for the association to carry out its programs: Advertising and promoting Red River Valley potatoes; research in marketing; development of new varieties, and of improved handling methods; research on storage.

Research on storage and handling is conducted in cooperation with the U.S. Department of Agriculture.

Several potato marketing cooperatives are serving the industry. The Associated Potato Growers Inc., is the largest and best known. Others are organized

as cooperatives formally, or operate in the manner of one, by sharing expenses and returns on an informal basis.

Associated Potato Growers Inc., with headquarters at East Grand Forks, Minn., markets about 20 percent of the fresh shipments out of the valley. It maintains high standards of marketing practices with three separate "wash" plants.

Arrangements are made by grower-members of Associated to store their crops in warehouses connected to the "wash" plants.

The number of dealers in the valley has declined in recent years. This follows patterns in other major potato-producing areas. While dealers did not come within the scope of this study, their decline here and elsewhere reflects a growing concentration in marketing of fresh crop sales of table and seed potatoes.

A unique feature of storage and marketing in the Red River Valley is use of the condominium structure. The producers in a given area organize a corporation to provide packing facilities and equipment. Ownership of the storage bins remain with the individuals involved.

The manager, usually a nonmember, is employed, and he supervises all phases of storage, grading, and marketing.

The producer usually retains control over timing and conditions of sale. Seldom in practice does the member-owner market other than through his own outfit; however, the right of choice is reserved subject to approval of the other members.

As is occurring in other major potato-production areas, processing in various forms is using an increasingly larger part of the crop each year. Six plants in the Red River Valley are making french fries, granules, flakes, and puffs. A considerable volume is shipped to Chicago and other cities in the mid-continent area for manufacture of potato chips.

The largest processor produces some of its requirements, contracts with growers, and buys on the market for the rest of its requirements.

GROWERS PICK TOP PROBLEMS

Overproduction, independence, and power surfaced as key words to problems most on the minds of valley growers.

The farmer apparently feared most the thought of too many potatoes which could, in sequence, cheapen the price of potatoes and lower his income. Secondly, the farmer was concerned about maintaining his historic independence. Allied to that is his third top worry, that processors and dealers

will gain too much power over economics of the potato industry.

Of the 119 farmers, 73 voted overproduction as a top problem. This represented 61 percent. Responses deviated very little when considered on the basis of acreage and age. However, educational levels of farmers did show a difference. Of those with more than a high school education, 14 percent considered overproduction to be a problem, compared with 73 percent of those with less than a high school education.

On the other hand, age was the most noticeable factor concerning perspectives on farmer independence. Some 55 percent considered independence a problem. While 53 percent of those with lower acreages rated independence a leading concern, 62 percent with high acreages rated it so. But an even higher ratio 71 percent, appeared in the under-35 category.

Farmers with large acreages considered economic power of processors and dealers very important, to the extent that 71 percent in that category so voted. Such a vote might be expected in view of the importance of processors as an outlet to large producers. Overall, 44 percent of the valley's potato growers believed power a serious problem.

The 119 farmers were each able to cast 3 votes for a total of 357 possible votes among the problems considered as having major importance. The problems receiving the highest number of votes were: Overproduction, 73; independence of farmers, 66; processor and dealer economic power, 52. The total vote for the three problems was 191 of a possible 357 votes, or 53 percent. Other problems included quality control, incomplete market information, transportation, inadequate advertising and promotion, fluctuating production; activities of Red River Valley Potato Growers Association, and inadequate leadership in the potato industry.

Conceivably, a problem given a first-place rating should be given more weight than one receiving a third-place rating. For example, overproduction may have received 20 votes: 10 as #1, 6 as #2, and 4 as #3 by one size class of farmers. Another class may have voted 20 votes for overproduction with 7 votes as #1, 7 for #2, and 6 for #3; in both instances, overproduction received more votes as the #1 problem, but was seen as relatively less significant by the second class because of the greater number of second and third choices. However, for this analysis, total choices for a given problem were used.

GROWERS' ATTITUDES TO SOLUTIONS

Marketing Agreements and Orders

Substantial interest in the use of a marketing agreement and order was evident in this survey. Seventy of the 119 farmers interviewed (59 percent) favored them as a possible solution to one or more major problems of the

Red River Valley potato industry (table 12).

The fluctuation in total supply of potatoes from the Red River Valley, resulting from either variation in yields or acreage or both, adversely affecting financial returns for the potato crop, was a major factor in favoring use of a marketing agreement by a majority as a constructive solution to this problem.

Twenty-six of the farmers voted for a marketing agreement to solve a single problem; 32 farmers voted for a marketing agreement as a preferred method of dealing with two or more serious problems; and 13 farmers wished to use a marketing agreement in coping with each of these serious problems. Thus, a total of 129 votes were cast for the marketing agreement approach.

Problems receiving the largest number of votes were: First, overproduction, stated earlier, by a wide margin; second, poor quality; and third, the basic independence of growers, making it possible for a minority to defeat the purposes of a majority. Thus, a marketing agreement could effecuate the purposes or plans of two-thirds of the growers voting in a referendum.

Also meeting with approval, but fourth in order of voting preferences by a narrow margin, was the use of a marketing agreement as a means of curtailing the economic power of processors and dealers, a matter of serious concern.

While 59 percent expressed support for a marketing agreement in the Red River Valley, it should be pointed out that 49 farmers, or 41 percent, did not specify its use as a device to correct industry ills. In fact, 13 farmers (11 percent) specifically opposed a marketing agreement for the valley. Since growers must approve a marketing agreement by $66\frac{2}{3}$ percent ($\frac{2}{3}$) of those voting, this survey suggests that without changes in circumstances or opinions, growers in the valley would not approve a marketing agreement in a referendum. Most of the farmers interviewed preferred a marketing agreement on a nationwide basis but there were some who would support an areawide agreement if a nationwide program could not be implemented.

Bargaining Devices (table 13)

Use of bargaining in the Red River Valley has had mixed results, according to farmers and farm organizations involved over a period of several years. Limited success was indicated in handling the 1970 crop, but the results were generally disappointing for 1971.

A serious effort was made in the fall of 1971 to bargain on an industry basis for the valley. However, the size of the crop, about which opinions varied despite estimates of the U.S. Department of Agriculture, resulted in a breakdown of negotiations and price stabilization efforts.

This survey shows that 60 farmers of the 119, or 50 percent, favored continuation of bargaining efforts to solve one or more difficulties facing the potato industry in the Red River Valley. Of that number, 17 farmers favored use of bargaining for more than one problem in attempting to solve industry difficulties.

Six farmers favored bargaining efforts in meeting what they considered the three most important problems. Three other farmers favored use of bargaining efforts in meeting three problems other than the three major ones most favored. These other three were quality control, better market information, and fluctuation of production.

Bargaining efforts thus were approved by the 60 farmers as the most practical way to solve problems listed as (1) inherent independence of farmers, (2) the economic power possessed by dealers and processors, and (3) the price-depressing influence of surplus production. While not actually expressed by others--as was done by 60 farmers--there was a general feeling by those interviewed that despite disappointing efforts in handling the 1971 crop, the bargaining committee of the Red River Valley Potato Growers Association should be continued so that in some way, and some time in the future, more could be accomplished. "How" and "when" is for future efforts to determine.

These 60 farmers cast 84 votes in favor of this marketing device but 59 votes of the 84 favored this method of coping with processor and dealer economic power.

Thus, 70 percent of the votes cast for the use of bargaining was centered on the problem of dealer-processor dominance. While true that 70 percent of the responses favored bargaining for this purpose, its significance is diluted in view of the total response. Sixty of the 119 farmers considered bargaining effective in counteracting the influence of the dealers-processors and believed that an organized effort to bargain for price and other terms is the most effective method of dealing with dealer-processor dominance.

Cooperatives

The cooperative approach was third in favor after a marketing agreement program and bargaining committee efforts, in that order. While 46 of the 119 growers approved the cooperative method, 73 did not. Any expansion attempt among cooperatives was strongly opposed by 14. Forty-six farmers considered cooperatives effective in solving problems as listed 66 times in the following order: Overproduction, 22; economic power of processors and dealers, 18; independence of growers, 17; and poor quality control, 9.

Of the 46 farmers who considered cooperatives an effective method of meeting industry problems, 29 saw them as the number one solution, 13 saw them as a secondary solution, and 4 favored to meet their problems in third order of preference.

Table 12--Relationship of major problems to selected characteristics of potato farmers

Characteristics	: Farmers :		: Responses :		: Overproduction :		: Independence of : Processor and dealer		: farmers :		: economic power	
	: :		: :		: :		: :		: :		: :	
	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Percent</u>
<u>Acres</u>												
Under 200	47	75	30	64	25	53	20	43				
200 - 499	51	76	31	61	28	55	17	33				
500 and over	21	40	12	58	13	62	15	71				
Total	119	191	73	61	66	55	52	44				
<u>Age</u>												
Under 35	17	30	10	59	12	71	8	47				
35 - 44	34	56	21	62	17	50	18	53				
45 - 54	39	54	23	59	19	49	12	31				
55 and over	29	51	19	65	18	62	14	48				
Total	119	191	73	61	66	55	52	44				
<u>Education</u>												
Under high school	30	50	22	73	17	57	11	37				
Some high school	13	16	9	69	5	38	2	15				
All high school	49	87	31	63	28	57	28	57				
Over high school	27	38	11	41	16	59	11	41				
Total	119	191	73	61	66	55	52	44				

Table 13--Responses and preferred solutions to specified problems

Most important problems	: Total number : of responses :	Preferred solutions											
		: Marketing agreement : : Order of importance :						: Bargaining : : Order of importance :					
		: 1 2 3 Total: 1 2 3 Total: 1 2 3 Total:						: 1 2 3 Total: 1 2 3 Total: 1 2 3 Total:					
		1	2	3	Total:	1	2	3	Total:	1	2	3	Total:
Number of responses													
Economic power of dealers and pro- cessors	99	7	11	4	22	15	22	22	59	4	11	3	18
Overproduction	83	21	11	16	48	5	3	5	13	8	6	8	22
Independence of growers	56	11	6	11	28	6	2	3	11	12	4	1	17
Poor quality control	39	7	12	10	29	1	--	--	1	4	2	3	9
Total re- sponses	277	46	40	41	127	27	27	30	84	28	23	15	66
Number of farmers re- sponding					70				60				46

FARMER COOPERATIVE SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Farmer Cooperative Service provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The Service (1) helps farmers and other rural residents obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs.

The Service publishes research and educational materials and issues News for Farmer Cooperatives. All program and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, or national origin.