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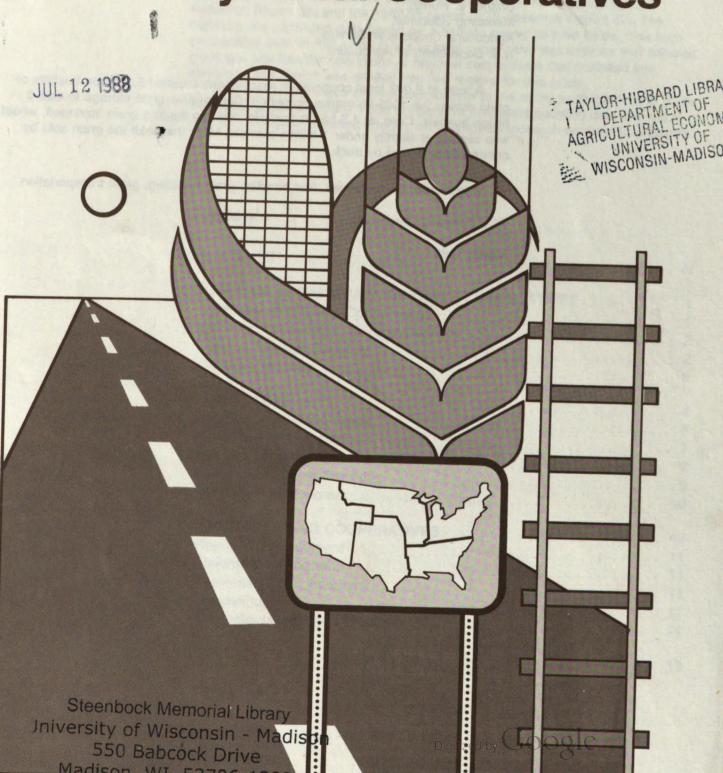
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Research Report Number 70 Marketing and Transportation of Grain By Local Cooperatives



#### **Abstract**

# Marketing and Transportation of Grain by Local Cooperatives

Charles L. Hunley Marketing Specialist Agricultural Cooperative Service U.S. Department of Agriculture

A total of 2,002 local cooperative associations handled 5.1 billion bushels of grain during the 1985-86 marketing period. Cooperative grain storage totaled 3 billion bushels. Corn, at 1.3 billion bushels, was the leading grain marketed; wheat was second at slightly under 1 billion bushels. More than half the grain sold by cooperatives moved by truck.

Key words: Cooperatives, first handler, grain handling, grain transportation.

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#### **Preface**

This study addresses only cooperative first-handlers of grain for the fiscal years ending in calendar 1986. It is comparable with studies previously conducted by the Agricultural Cooperative Service covering the 1979-80 period (ACS Research Report 35) and the 1982-83 period (ACS Research Report 47). The statistics are expanded data based on a sample survey defined below. The term cooperative used in this study refers to local cooperative associations that handled grain and first-handler operations of regional cooperatives that operated line elevators. The Nation was divided into five regions for this study.

The author expresses sincere appreciation to the many participants who made this report possible. Nearly 1,000 cooperative managers supplied data and more than 25 managers furnished information in followup research on specific problems.

#### **Contents**

HIGHLIGHTS i
PROFILE OF LOCAL GRAIN-HANDLING COOPERATIVES  Membership of Local Cooperatives  Licensed Local Grain Storage Capacity  Type of Storage Capacity  Storage Capacity
GRAIN VOLUME  Disposition of Grain Sales  Mode of Transportation  Railcars per Shipment  Unit Train-Loading Facilities  Railroad Abandonment  1
PROBLEMS FACING COOPERATIVES 1 Financial Management 1 Government Programs 1 Depressed Farm Economy 1 Competition 1 Noncompetitive Freight Rates 1
APPENDIX

#### **Highlights**

Local grain-handling cooperative associations handled an average of 2.5 million bushels of grain per association in the 1985-86 marketing period. That amount included grain handled through the grain bank and Commodity Credit Corporation (CCC) programs.

Storage capacity per cooperative association averaged 1.5 million bushels. Taking the number of locations into account (2 per association), average storage per location was about 737,000 bushels. Storage capacity per elevator location increased about 16 percent during the past 3 years. Capacity per cooperative association went up about 23 percent.

About 94 percent of the grain-handling associations were licensed by Federal and/or State agencies. Most had State licenses, but about 14 percent had both Federal and State licenses.

About 38 percent of the grain sold was corn. Wheat accounted for about 28 percent, while soybeans and grain sorghum combined amounted to about 24 percent. Other grains made up the balance.

The average turnover rate (ratio of grain volume to storage capacity), including the grain bank and CCC, was 1.7, down from 1.9 during the 1982-83 period and 2 during the 1979-80 period.

Excluding grain handled through the grain bank and CCC programs, 11 percent was sold locally, 43 percent went to other cooperatives, and 46 percent went to noncooperative grain dealers. Marketings through other cooperatives declined about 7 percentage points, compared with those during the 1982-83 period.

Local cooperatives transported about 52 percent of their grain by truck, 46 percent by rail, and 2 percent by barge or other conveyance. About 74 percent of cooperative storage space was on a rail line. Railcar units of 2 to 24 cars were the most common, making up about 50 percent of the grain shipped by that conveyance. Units of 25 to 50 and 50 to 74 made up 19 and 17 percent of rail shipments, respectively. Single car shipments made up about 8 percent of shipments. About 14 percent of all cooperative locations were capable of loading 25 or more cars units.

In the past 3 years, about 7 percent of locally owned cooperative elevators lost rail service.

Of those cooperatives reporting problems, financial management and government programs were mentioned most often, followed by depressed farm incomes and competition. The order of ranking varied widely among the regions.



# Marketing and Transportation Of Grain by Local Cooperatives

Charles L. Hunley Marketing Specialist

Local grain-marketing cooperatives furnish important services to the many producers of the grains that move into international and domestic trades. Marketing these huge stores of grain requires extensive and flexible storage and transportation systems. With harvest completed in very short periods of time, orderly marketing depends on a large and well-managed storage system. Local farmer-owned cooperatives are major assemblers, storers, and marketers of grain in the Nation.

# PROFILE OF LOCAL GRAIN-HANDLING COOPERATIVES

Cooperatives handled a diversity of grains, usually dictated by the different grains produced and marketed by members. Memberships and grains marketed varied widely among the five designated regions used in this report (fig. 1).

## Membership of Local Cooperatives

Membership in the estimated 2,000 grain-handling cooperative associations totaled about 2.3 million producers, or an average of more than 1,100 members per association.

This represents an increase of about 20 percent over membership numbers for the 1982-83 period, but still about 11 percent under the 1979-80 period. Evidence of consolidation continues with growth in membership per association coupled with the continued decline in the number of associations. Regions I and II had the largest

average membership per association, 3,210 and 4,190 respectively. Memberships per association averaged significantly fewer in regions III, IV, and V. Grain producers accounted for 51 percent of the memberships in all associations, but memberships varied from 17 percent in region II to 82 percent in region V (table 1).

Figure 1—Reporting regions

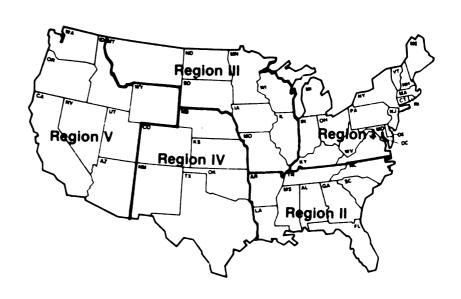


Table 1—Membership of local grain-handling cooperative associations, by region, 1985-86

Total			Members	
Region	associations	Grain producers	All other	Total
		Number		
1	227	240,032	489,231	729,263
H	56	39,362	195,428	234,790
111	1,086	557,534	271,946	829,480
IV	561	283,894	144,987	428,881
V	72	24,073	4,967	29,040
All regions:				
1985-86	2,002	1,144,895	1,106,559	2,251,454
1982-83	2,060	1,235,803	631,439	1,867,242
1979-80	2,339	1,481,771	1,043,597	2,525,368

Table 2—Cooperative associations with licensed grain storage warehouses, by type of license and region, 1985-86

	Cooperative associations		Туре	of license	
Region	with licensed grain storage warehouses	Federal	State	Federal and State	No license
	-	Number			
1	187	19	96	72	40
II	33	6	22	5	23
111	1,041	196	718	127	45
IV	545	164	326	55	16
V	68	22	41	5	4
All regions:					
1985-86	1,874	407	1,203	264	128
1982-83	1,937	486	1,220	231	123
1979-80	2,079	497	1,329	253	260

# Licensed Local Grain Storage Capacity

About 94 percent of the cooperatives that operated storage facilities were licensed by some regulatory agency to operate grain marketing and/or storage operations. Of those licensed, about 64 percent had only State licenses, while about 22 percent had only Federal licenses. Another 14 percent had both Federal and State licenses.

About 98 percent of the local associations in region IV and about 96 percent in region III had licenses. A considerably lower percentage of the associations in region II, slightly more than half, were licensed (table 2).

Compared with the 1982-83 period, the percentage of cooperatives licensed showed no change, but a slight decline in Federal licenses and a slight increase in Federal and State licenses were noted.

#### Type of Storage Capacity

The upright elevator, a grain storage facility with a greater height than width, was by far the most popular, making up about 76 percent of total storage capacity. This does, however, represent a decrease from the storage capacity during the 1982-83 period, as cooperatives look for less expensive alternatives in supplying storage capabilities. Cooperatives in region I had 88 percent of upright storage, while upright storage in the other regions ranged from 73 to 79 percent. The national average was 76 percent, down 5 percent from that during the 1982-83 and 1979-80 periods (table 3).

Nearly all associations reported having flat storage. Nationally about 24 percent of all storage is flat. About 12 percent of the cooperatives in



region I used flat storage, while its use in the other regions was in the 21- to 27-percent range.

#### Storage Capacity

Local cooperative associations continued to increase storage capacity nationally through both consolidation and building of capacity. On an association level, capacity increased 23 percent above the levels of 1982-83; and on a location basis, an increase of 16 percent was noted. During the 1985-86 period, local associations had an estimated capacity of 3 billion bushels, about 20 percent more than during the 1982-83 period (table 3).

Overall, cooperative capacity averaged about 1.5 million bushels but, it varied widely among the regions (table 4). Associations in region II had the largest volume of storage per association at about 3.1 million bushels, followed closely by associations in region V with an average of 3 million. Among associations in the other regions capacity ranged from 1 to 1.6 million bushels.

Average storage capacity per elevator location ranged from 526,000 bushels in region I to 877,000 in region II. The average for the country was 737,000 bushels per location. As shown in table 4, associations in region V had 4.9 locations per association. Region II had 3.6 locations per association. Region I had 2, region IV had 1.9, and region III had 1.8. On a national basis, there were two locations per cooperative association (table 4).

Utilization of facilities went down slightly again. During the 1979-80 marketing period the turnover rate (ratio of volume handled to total storage capacity) was 2, during

Table 3—Capacity of local cooperative associations, by storage type and region, 1985-86

Region	Total storage	Upright	Flai
	1,000 bushels	Pe	rcent
1	239,397	239,397 88	
11	173,225 77		23
III	1,442,220 73		27
IV	943,252 76		24
V	217,645	79	21
All regions:			
1985-86	3,015,739	76	24
1982-83	2,514,930 81		19
1979-80	2,334,743	81	19

Table 4—Local grain-handling cooperatives: Number, average locations per association, and storage capacity, by region, 1985-86

		Average locations	Average stora	age capacity
Region	Association	per association	Per association	Per location
	Nu	ımber	1,000 b	ushels
1	227	2.0	1,055	526
H	56	3.6	3,121	877
HI	1,086	1.8	1,327	722
IV	561	1.9	1,682	866
V	72	4.9	3,023	616
All regions:				
1985-86	2,002	2.0	1,506	737
1982-83	2,060	1.9	1,221	634
1979-80	2,339	1.7	998	574

Table 5—Grain volume handled per association and location, and turnover ratio, by region, 1985-86

	Grain volume handled <sup>1</sup>				
Region	Total	Average per association	Average per location	Turnover ratio <sup>2</sup>	
		1,000 bushels			
l l	465,484	2,051	455	1.9	
11	151,430	2,704	198	.9	
111	2,658,142	2,448	1,332	1.8	
IV	1,633,813	2,912	1,499	1.7	
V	159,343	2,213	451	.7	
All regions:					
1985-86	5,068,212	2,532	1,239	1.7	
1982-83	4,696,414	2,270	1,184	1.9	
1979-80	4,578,081	1,957	1,125	2.0	

<sup>&</sup>lt;sup>1</sup>Includes grain bank and CCC grain.

Table 6—Distribution of grains handled by local cooperative associations by region, 1985-86

Onein			Region			Takal
Grain -	l	11	111	IV	٧	- Total
		-	Percent	· <b>-</b>		
Corn	18	4	64	14	(1)	100
Wheat	4	2	49	35	10	100
Soybeans	21	9	62	8	0	100
Sorghum	(1)	9	14	<b>7</b> 7	0	100
Oats	8	(¹)	84	6	2	100
Barley	2	(¹)	74	4	20	100
Rye	0	0	100	(¹)	0	100
Flax	0	0	100	0	0	100
Sunflower	0	0	99	1	0	100
Buckwheat	80	0	20	0	0	100
Rape	0	0	0	0	100	100
Triticale	0	0	0	100	0	100
Millet	0	0	59	41	(¹)	100
Safflower	0	0	82	0	18	100
All grains:						
1985-86	11	4	58	23	4	100
1982-83	13	5	54	24	4	100
1979-80	12	8	52	22	6	100

<sup>&</sup>lt;sup>1</sup>Less than 0.5 percent.

1982-83 it was 1.9, and in the 1985-86 period the ratio was 1.7. The turnover rate varies widely on a regional basis, with region I having the highest turn rate at 1.9 times, while region V has the lowest at 0.7 times per year (table 5).

#### **GRAIN VOLUME**

The 2,000 local grain-handling cooperatives handled 5.1 billion bushels of grain during the 1985-86 marketing season. This included grains handled through grain banks, the CCC, and regular marketing channels. The average volume handled by individual associations in region III was 2.9 million bushels for the highest average, while cooperatives in region I had the lowest average volume at 2.1 million bushels. The national average per association was 2.5 million bushels (table 5).

Region III was the major assembler of grain, originating about 58 percent of all grain marketed by local cooperatives; region IV followed with about 23 percent. Cooperatives in region III showed about a 4-percent gain; grain assembly in region IV declined 1 point, compared with that during 1982-83. Region I marketed about 11 percent of the total, while regions II and V each originated about 4 percent. Cooperatives in region III were the major cooperative originators of all the major grains except grain sorghum (tables 6, 7).

Corn accounted for about 38 percent of the grain marketed through regular channels by local cooperative associations. Wheat was second with about 28 percent, followed by soybeans with 16 percent, and sorghum with about 8 percent. The remainder of grain crops accounted for 10 percent (table 8).



<sup>&</sup>lt;sup>2</sup>The ratio of volume handled to storage capacity.

CCC program activity more than doubled, compared with the 1982-83 marketing period. This activity represents about 23 percent of all grain handled by cooperatives. The principal grain in the CCC program was corn, which made up about 39 percent of the grains handled through the program. Grain sorghum was second at 26 percent, and wheat had about 24 percent of the total volume. Cooperatives in region III were the largest handlers, with about 53 percent of the activity, followed by region IV with 40 percent (tables 9. 10).

About 9 percent of the grain handled by cooperatives came from grain bank programs. The new leader in grain bank activity was sorghum, which represented about 58 percent of the volume. Corn and wheat followed with 19 and 17 percent respectively.

#### Disposition of Grain Sales

Local cooperatives assemble grain supplies in the initial stop through the marketing chain. Of the grain sold by local cooperatives, 43 percent was sold to other cooperatives, down 7 percent from the amount sold during the 1982-83 marketing period (table 11). Forty-six percent of sales moved to noncooperative firms, while 11 percent was sold locally to farmers and truckers.

Local cooperatives in all regions marketed less through other cooperatives. In region III, local cooperatives utilized other cooperatives for 49 percent of their marketing. In region IV the share was 37 percent, in region I it was 35 percent, and in region II—reflective of the concentration of centralized cooperatives—21 percent was marketed through other cooperatives.

Table 7—Total and average grain volume marketed per association and location, by region, 1985-86

		Grain volume marketed	11			
Region	Total	Average per association	Average per location			
		1,000 bushels				
ı	389,833	1,717	857			
II	143,610	2,588	727			
III	1,962,330	1,807	984			
IV	774,369	1,381	710			
V	133,618	1,886	378			
All regions:						
1985-86	3,403,760	1,700	832			
1982-83	3,920,968	1,904	989			
1979-80	4,578,081	1,957	1,124			

<sup>1</sup>Does not include grain handled in grain bank and CCC programs.

Table 8—Specified volumes of grain marketed through regular channels by local cooperative aesociations, 1985-86

Grain	Regular market			
	1,000 bushels	Percent		
Corn	1,288,516	38		
Wheat	947,916	28		
Soybeans	539,660	16		
Grain Sorghum	262,736			
Oats	95,140	3		
Barley	204,685	6		
Rye	4,485	(1)		
Flax	6,245	(1)		
Sunflower	50,035	1		
Buckwheat	165	(1)		
Millet	3,691	(1)		
Rape	43	(1)		
Triticale	8	(1)		
Safflower	435	(1)		
Total	3,403,760	100		

<sup>&</sup>lt;sup>1</sup>Less than 0.5 percent.

The proportion of each grain sold to different outlets varied greatly. About 44 percent of the oats were sold locally or to truckers, while about 1 percent of wheat and soybeans was marketed locally. About 56 percent of the wheat stayed within the cooperative channels, while about 52 percent of the soybeans and 49 percent of the corn moved to noncooperative markets (appendix table 3).

Table 9—Specified volumes of grain handled by local cooperative associations, by type of grain, 1985-86

Grain	Regular market	Grain bank	CCC			
		1,000 bushels				
Corn	1,288,516	90,110	465,399			
Wheat	947,916	83,901	285,694			
Soybeans	539,660	3,117	93,507			
Grain sorghum	262,736	274,098	305,884			
Oats	95,140	11,916	8,366			
Barley	204,685	7,997	29,956			
Rye	4,485	0	0			
Flax	6,245	0	0			
Sunflower	50,035	0	0			
Other grains <sup>1</sup>	4,342	3	4,504			
Total	3,403,760	471,142	1,193,310			

<sup>\*</sup>Includes buckwheat, millet, rape, triticale, and safflower.

Table 10—Grain bank and CCC grain handled by local cooperative associations, by region, 1985-86

	Grain	Grain bank grain		grain
Region	Volume	Distribution of volume	Volume	Distribution of volume
	1,000 bu.	Percent	1,000 bu.	Percent
1	21,853	5	53,798	4
H	909	(¹)	6,911	1
111	63,877	13	631,935	53
IV	376,757	80	482,687	40
V	7,746	2	17,979	2
All regions: 1985-86	471,142	100	1,193,310	100
1905-00	471,142	100	1,193,310	100
1982-83	283,603	-	491,659	•
1979-80	115,325	-	112,187	•

<sup>&</sup>lt;sup>1</sup>Less than 0.5 percent.

Table 11—Distribution by market outlet of grain sold by local cooperative associations, 1985-86 and 1982-83

			Grain	sold		
Region 1985	Loc	ally	То соор	perative	To nonco	operative
	1985-86	1982-83	1985-86	1982-83	1985-86	1982-83
			- Per	cent		
1	9	4	35	49	56	47
H	19	4	21	27	60	69
Ш	10	11	49	53	41	36
IV	14	18	37	51	49	31
٧	1	3	29	37	70	60
All regions	11	11	43	50	46	39

Table 12—Distribution of grain marketed by local cooperative associations, by mode of transportation and region, 1985-86 and 1982-83.

	Mode of transportation							
Region	Truck		Rail		Other			
	1985-86	1982-83	1985-86	1982-83	1985-86	1982-83		
		-	Per	cent				
1	54	64	44	32	2	4		
H	54	44	27	38	19	18		
111	52	55	48	44	(¹)	1		
IV	55	57	45	43	(¹)	(¹)		
V	30	28	51	52	19	20		
All regions	52	55	46	42	2	3		

#### Mode of Transportation

During the 1985-86 marketing period, local cooperative elevators in the United States utilized trucks to transport 52 percent of their grain sales, down slightly from the 1982-83 average of 55 percent. Truck usage declined modestly in region I, down about 10 percent, and slightly less in III and IV. Regions II and IV gained (table 12).

Grain was shipped by many different conveyances. For example, trucks hauled about 72 percent of the sorghum, but only about 30 percent of the wheat (table 13). Abandonment of rail lines forced many cooperatives to depend on trucks, while consolidation and establishment of unit train-loading facilities have had an offsetting effect. (Rail abandonment and unit train facilities will be discussed in detail later.)

Table 13—Distribution of grain marketed by local cooperative associations, by mode of transportation and type of grain, 1985-86 and 1982-83

	Mode of transportation							
Туре	Tru	uck	R	ail	Otl	Other		
	1985-86	1982-83	1985-86	1982-83	1985-86	1982-83		
			Per	cent				
Corn	57	58	42	41	1	1		
Wheat	30	37	67	59	3	4		
Soybeans	71	68	26	26	3	6		
Sorghum	72	77	27	22	1	1		
Oats	74	70	26	30	(¹)	(¹)		
Barley	30	29	67	68	3	3		
Rye	29	<b>3</b> 5	71	65	0	0		
Flax	64	51	36	49	0	0		
Sunflower	48	44	52	56	0	0		
Buckwheat	28	63	72	37	0	0		
Millet .	63	61	37	39	0	0		
Mustard	0	100	0	0	0	0		
Rape	100	100	0	0	0	0		
Triticale	100	100	0	0	0	0		
Safflower	96	0	4	100	0	0		
All grains	52	55	46	42	2	3		

Railroads shipped about 46 percent of grain from local elevators. This represented an increase of about 4 percent over the 1982-83 period. On a percentage basis, cooperatives in region V were the largest rail shippers, sending about 51 percent by rail. However, on a volume basis, region III was the largest user, accounting for about 60 percent of all rail shipments. On a commodity level, more wheat and corn were shipped by rail than any other commodities, 42 percent and 35 percent respectively.

Railroad service was led by the Burlington Northern (BN), which served about 23 percent of local cooperatives' storage on rail lines. The Chicago Northwestern was next with about 13 percent, followed by Atchison, Topeka, and Santa Fe at about 10 percent (table 14).

Table 14—Storage capacity on major railroads serving local cooperatives, by region, 1985-86

<b>-</b>	Region							
Railroad	Total	ı	11	111	IV	٧		
			1,000	bushels				
Burlington Northern	512,779	_	1,480	270,848	193,241	47,210		
Chicago Northwestern	229,959		_	274,255	18,704	_		
Atchison, Topeka & Santa Fe	19,999	3,419		8,849	207,731	_		
Union Pacific	194,182	_	_	_	137,204	56,978		
Sooline	101,138	_	_	101,138	_	_		
Missouri Pacific	99,217	_	37,003	16,567	45,647	_		
Ilinois Central Gulf	96,729	_	1,691	95,038	_			
St. Louis Southwestern	86,290	_	64,999	_	21,291			
Norfolk-Southern	70,282	22,199	6,253	41,830	_	_		
CSX System	56,328	36,128	12,506	7,694		_		
Santa Fe	<b>54</b> ,095	_	· —	3,030	51,065	_		
Norfolk Western	49,066	35,748	_	13,318	_	_		
Cheaspeake & Ohio	45,714	45,714		<u>-</u>	_	_		
Conrail	38,628	33,040	_	5,588	_	_		
KYLE	23,575	_	_	<u>-</u>	23,575			
Oklahoma, Kansas, Texas	18,454	_	_	_	18,454			
Iowa Northern	17,581	_		17,581		_		

<sup>&</sup>lt;sup>1</sup>Less than 0.5 percent.

Region III was the largest user of rail service, followed by region IV.

Other types of shipments, such as barge, accounted for only about 2 percent of grain shipments from local cooperatives.

#### Railcars Per Shipment

The number of railcars per shipment continued to show increased usage of multicar units and a decline in single car shipments. During the 1985-86 period, railroads used mostly 2-24 car units, which accounted for 50 percent of all grain shipped by rail. Compared to the earlier surveys, 25-49 and 50-74 units showed slight increases in percentage terms, while larger units showed no volume increases. Single car volume dropped 9 percent, compared with the 1982-83 period, and 33 percent for the 1979-80 period.

In region III, the largest grain-shipping area, 37 percent of the rail grain moved in 2-24 units and 25 and 22 percent in units of 25-49 and 50-74 respectively. On a percentage basis, region I was the largest user of more than 100 car units (tables 15 and 16).

#### **Unit Train-Loading Facilities**

Fourteen percent of local elevators had sidings that enabled them to load rail car units of 25 or more cars. Average storage capacity at these elevators was 1.5 million bushels. Sixty-eight percent of the locations were in region III and 19 percent in region IV (table 17).

Table 15—Percentage distribution of rail shipments by local cooperative associations, by number of railcars per shipment, by region, 1985-86

		Number of cars in rail shipment					
Region	Volume	Single	2-24	25-49	50-74	75-99	100 plus
	1,000 bu.			Perd	cent		
1	171,215	2	85	2	4	0	7
H	38,799	2	98	0	0	0	0
111	947,713	8	37	25	22	4	4
IV	350,247	11	66	6	14	2	1
V	67,512	18	28	54	0	0	0
All regions:							
1985-86	1,575,486	8	50	19	17	3	3
1982-83	1,661,769	17	48	16	11	5	3
1979-80	1,866,907	41	29	11	7	8	4

Table 16—Percentage distribution of volumes of selected major grains shipped by rall by local cooperative associations, by number of railcars per shipment, 1985-86

	Type of grain								
Number of cars	Corn	Wheat	Soybeans	Grain sorghum	Oats	Barley			
			Per	rcent					
Single	4	9	8	11	14	15			
2-24	47	51	52	73	53	45			
25-49	19	19	18	5	10	22			
50-74	18	18	11	10	23	17			
75-99	6	1	6	1	0	0			
Over 100	6	2	5	0	0	1			
	100	100	100	100	100	100			

Table 17—Local cooperative elevator locations capable of loading 25 or more car units and storage capacity at those locations, by region, 1985-86

_		Storage	capacity
Region	Locations	Total	Average
	Number	1,000 1	bushels
1	30	79,965	2,666
H	6	53,674	8,945
Ш	402	486,408	1,210
IV	113	231,013	2,045
V	38	50,888	1,339
All regions	589	901,948	1,531

Table 18—Storage capacity at local cooperative elevator locations where rall service has been discontinued in the last 3 years, by region, 1985-86

		Storage	capacity
Region	Locations	Total	Average
	Number	1,000 L	oushels
1	28	7,705	275
II .	6	5,750	<b>9</b> 58
III	138	80,342	582
IV	58	43,547	751
V	59	33,417	566
All regions:			
1985-86	289	170,761	591
1982-83	406	222,381	548

Table 19—Storage capacity of cooperatives on rail lines not scheduled for abandonment, on rail lines scheduled for abandonment, and not on rail lines, by region, 1985-86

Region	Not scheduled for abandonment	Scheduled for abandonment	Not on rail line
		1,000 bushels	
1	189,972	0	49,425
II	126,636	3,456	43,133
IN	1,004,036	8,909	429,275
IV	786,107	3,040	154,105
V	115,508	311	101,826
All regions	2,222,259	15,716	777,764
		Percent	
Percentage of			
total storage	73	1	26

#### Railroad Abandonment

Rail service was abandoned at 289 local grain-handling locations during the 3-year period from 1983 to 1986, compared with 406 locations for the 1980-83 period. Total storage at all locations where abandonment has occurred during the last 3 years amounted to about 171 million bushels. This represents about 8 percent of the storage that was located on rail lines in 1983. Average storage capacity at these locations was slightly under 600,000 bushels (table 18). About 48 percent of the locations on abandoned lines, were in region III. Cooperatives in region III had about 47 percent of the total capacity at locations where rail service was discontinued.

Region II had the lowest percentage of abandonments with 2 percent of the total, yet it had the highest average capacity per location.

Scheduled rail abandonment, lines scheduled for abandonment in the next 3 years, lessened again (table 19). These numbers may change quickly, as regulations no longer require long-term notification of abandonment plans.

## PROBLEMS FACING COOPERATIVES

Cooperative managers perceived operational problems quite differently, and variances were noted among the regions. Financial management and compliance with government programs were the problems mentioned most often.



#### Financial Management

Financial management was a frequent problem facing cooperatives, making up 12 percent of the total responses (table 20). This problem was the most often mentioned problem in regions I, III, and V, and ranked second and third in the other two regions. Within this broad category, several more specific problems were observed, such as maintaining current accounts receivable, cash flows, cost-margin ratios, and declined stock valuation in regional cooperatives.

#### **Government Programs**

The effects on local cooperatives by recent government programs were mentioned in 12 percent of the responses. These problems covered a broad range of specific responses, including the complex paperwork problems, declining grain exports, whole herd buyout programs, and several others.

#### Depressed Farm Economy

The depressed farm economy has had a far-reaching impact upon cooperatives throughout the country. As farms are sold and/or combined into larger units, the operators lose the loyalty to the local and traditional marketing and purchasing organizations. This loss in volume reduces the local revenue. Slowness or inability of the patrons to pay for services causes financial strain on the local business organizations. Cooperatives in region II, an area made up of smaller sized farms, most frequently viewed this as the leading problem, with 35 percent of the responses confirming their view.

Table 20—Problems facing local grain cooperative association, by region, 1985-86

			Region			A.11
Problem category	1	II	111	IV	٧	- All Regions
			Per	cent		
Financial management	19	9	12	11	11	12
Government programs	6	9	12	12	11	12
Depressed farm economy	8	35	9	14	0	11
Competition	10	5	11	7	8	9
Non competitive frieght						
rates	3	0	10	7	8	8
Members	1	2	7	10	8	7
Reduced acres	11	7	5	7	5	6
Transportation	0	0	6	6	9	5
Management	4	0	5	6	5	5
Prices	8	28	2	5	13	5
Direct marketing	7	5	4	4	1	4
Farm storage	12	0	4	2	4	4
Facilities	1	0	4	3	6	4
Competition with other						
cooperatives	1	0	4	2	0	2
Volume	3	0	1	1	6	2
Exports	4	0	1	2	1	2
Elevators	0	0	2	1	0	1
Other	2	0	1	0	4	1
Total	100	100	100	100	100	100

#### Competition

Competition moved up the list of problems. Concerns cover a wide area, ranging from direct purchasing by the larger producers, greater competition for smaller market volume, and price-cutting to gain business.

#### Noncompetitive Freight Rates

Noncompetitive freight rates were the concern expressed primarily by smaller cooperatives that lacked either the volume to compete with large-volume shippers or that were located so they could not ship unit train quantities of grain. It was the fourth most mentioned problem in regions III and IV, the largest grain-shipping areas.

### **Appendix**

			Reg	gion		
Grain	1	11	III	IV	٧	Total
			1,000 L	oushels		
Corn	225,652	57,356	826,891	178,008	609	1,288,516
Wheat	39,143	16,297	468,165	334,400	89,911	947,916
Soybeans	112,990	45,984	337,364	43,322	0	539,660
Sorghum	733	23,862	35,848	202,293	0	262,736
Oats	7,914	96	79,889	5,657	1,584	95,140
Barley	3,269	15	151,563	8,445	41,393	204,685
Rye	0	0	4,470	15	0	4,485
Flax	0	0	6,245	0	0	6,245
Sunflower	0	0	49,328	707	0	50,035
Buckwheat	132	0	33	0	0	165
Millet	0	0	2,177	1,514	0	3,691
Rape	0	0	0	0	43	43
Triticale	0	0	0	8	0	8
Safflower	0	0	357	0	78	435
Total	389,833	143,610	1,962,330	774,369	133,618	3,403,760

# Appendix Table 2—Volume of grain sold by local cooperative associations by market outlet and region, 1985-86

Region	Sold locally	Sold to cooperatives	Sold to noncooperatives
		1,000 bushels	
1	35,482	136,825	217,526
11	27,580	29,323	86,707
III	191,892	967,233	803,205
IV	104,911	290,025	379,433
V	1,606	39,040	92,972
All regions	361,471	1,462,446	1,579,843



## Appendix table 3—Distribution of grains sold by local cooperative association, by market outlet, 1985-86

		Gr	Grain sold						
Grain	Locally	To cooperative	To noncooperative	Total					
		Percent							
Corn	18	33	49	100					
Wheat	1	56	43	100					
Soybeans	(¹)	47	52	100					
Grain sorghum	.19	35	46	100					
Oats	44	28	28	100					
Barley	9	46	45	100					
Rye	1	68	31	100					
Flax	1	68	31	100					
Sunflower	(1)	51	49	100					
Other grains	3	10	87	100					

<sup>&</sup>lt;sup>1</sup>Less than 0.5 percent.

## Appendix table 4—Volume of grain shipped by rail by local cooperative associations, by number of cars per shipment and region, 1985-86

	Number of cars							
Region	Single	2-24	25-49	50-74	75-99	100 plus		
	1,000 bushels							
1	3,408	145,712	2,713	7,026	0	12,356		
П	763	38,036	0	0	0	0		
111	72,041	356,625	233,992	211,630	37,347	36,078		
IV	36,408	232,707	19,655	49,702	7,962	3,813		
V	12,241	18,637	36,634	0	0	0		
All regions:								
1985-86	124,861	791,717	292,994	268,358	45,309	52,247		
1982-83	275,196	797,964	271,318	182,729	78,181	56,381		
1979-80	759,144	542,783	208,464	138,992	143,572	73,952		

## Appendix table 5—Regional distribution of volume of grains handled by local cooperatives, by region, 1985-86

	Region							
Grain						Total	Total	
	I	II	111	IV	V	1985-86	1982-83	
				Percent				
Corn	58	40	42	23	1	38	40	
Wheat	10	11	24	43	67	28	24	
Soybeans	29	32	17	6	0	16	17	
Sorghum	(¹)	17	2	26	0	8	10	
Oats	2	(¹)	4	1	1	3	2	
Barley	1	(¹)	8	1	31	6	5	
Rye	0	0	(¹)	0	0	(¹)	(¹)	
Flax	0	0	(¹)	0	0	(¹)	(1)	
Sunflower	0	0	3	(1)	0	1	2	
Buckwheat	(¹)	0	0	0	0	(1)	(¹)	
Millet	0	0	(¹)	(¹)	0	(1)	(¹)	
Mustard	0	0	0	0	0	0	(1)	
Triticale	0	0	0	(1)	0	(1)	(¹)	
Safflower	0	0	(¹)	0	(1)	(¹)	(1)	
	100	100	100	100	100	100	100	

<sup>&</sup>lt;sup>1</sup>Less than 0.5 percent.

# Appendix table 6—Volume of grain shipped by local cooperative associations by mode of transportation, by region, 1985-86

	Mode of transportation								
Region	Truck	Rail	Other	Total					
	1,000 bushels								
1	209,913	171,215	8,705	389,833					
H	77,631	38,799	27,180	143,610					
111	1,012,089	947,713	2,528	1,962,330					
IV	424,103	350,247	19	774,369					
V	40,206	67,512	25,900	133,618					
All regions:									
1985-86	1,763,942	1,575,486	64,332	3,403,760					
1982-83	2,153,214	1,661,770	105,984	3,920,968					

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

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