



A STUDY OF GRAIN MARKETING IN LENAWEЕ AND HILLSDALE
COUNTIES WITH EMPHASIS ON THE MARKETING
INFORMATION WHICH COULD BE MADE
AVAILABLE TO FARMERS BY A
DISTRICT MARKETING AGENT

By

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ABSTRACT

The District Marketing Agent is a recent undertaking of the Michigan Cooperative Extension Service. This study was made as an effort to aid those who are pioneering in this project by specifically considering the grain marketing situation and problems of the Livestock and Grain Marketing Agent in the Lenawee-Hillsdale area.

Corn was the most important crop of the district on an acreage basis, but was second to wheat in value of sales. Corn has been increasing in acreage and production. Wheat had an increasing trend, but was decreasing due to government acreage controls. Oats had a decreasing trend in both acreage and production. Soybeans had a recent decreasing acreage but increasing production trend. Barley and rye were comparatively unimportant crops which had decreased in importance over the years.

There were many grain marketing facilities in the area. Despite the large number of elevators and flour and feed mills in the district a large amount of grain moved outside the district to the first buyer.

In a survey of a geographically selected group of farmers it was found that the radio was their most valuable source of marketing

information. These farmers rated newspapers second in importance, with individuals, magazines, television, and special market reports following in order. Radio station WJR, of Detroit, was the most popular one for marketing information. Station WABJ, of Adrian, was also widely listened to, especially in Lenawee County. Two daily newspapers gave nearly complete coverage to the farmers of the district. Other daily newspapers and all weekly newspapers were unimportant to these farmers as a source of marketing information. Individuals, notably elevator managers, were often consulted for grain marketing advice. Television and special market reports were of negligible value for this purpose.

There are four parts to the marketing problem which will confront a grain marketing agent. The first of these is what grain to produce. Three kinds of information are needed to answer this question. These are the market price outlook, physical input-output relationships of the various alternatives, and timely information on government agricultural programs. When to market grain involves two questions: first, price outlook, and second, the cost of storage. Each farmer will need to figure his own storage costs because they are different for every farm. Where to market the grain is another issue for each farmer to answer for himself. The marketing agent, in this respect, should act as a source of information concerning

locations of buyers, their facilities, services, and charges. How to market grain most effectively involves the relative profitabilities of marketing grain or livestock. It was not made a part of this study.

This study was conducted to collect, analyze, and present information to assist the district marketing agent. It is expected to be an aid to the agent. However, only experience can bring the answer to the problem of how he can best serve the people of his district.

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Dr. Kenyon T. Payne of the Farm Crops Department and Drs. Harold M. Riley and John L. Fisher of the Agricultural Economics Department listened to an oral presentation of this project and offered valuable suggestions.

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The writer, of course, accepts responsibility for any errors that may be present in this manuscript.

TABLE OF CONTENTS

CHAPTER	Page
I. INTRODUCTION	1
Purpose of the Study	2
Grain production and sales	2
Timing of grain sales	3
Grain marketing facilities and alternatives . .	3
Market news	3
Marketing agent	4
Scope of the Study	4
Sources of Data	4
Summary	7
II. LENAWEЕ AND HILLSDALE COUNTIES	10
Grain Crops and Their Importance	14
Corn	14
Wheat	17
Oats	19
Soybeans	22
Barley	24
Rye	24

CHAPTER	Page
Marketing Facilities	26
Elevators in the area	26
Elevators outside the area	29
Other grain buyers in the district	30
Summary	31
III. MARKETING INFORMATION	34
Farm Sources of Marketing Information	35
News Disseminating Services Available to the Marketing Agent	44
Publications	46
Summary	49
IV. THE DISTRICT GRAIN MARKETING AGENT	51
The Marketing Problem	52
What to produce	53
When to market	54
Where to market	68
How to market most effectively	72
Summary	73
V. SUMMARY AND CONCLUSIONS	77
LIST OF REFERENCES	83
APPENDIXES	84

LIST OF TABLES

TABLE	Page
I. Grain Acreages, Production, and Sales in Lenawee and Hillsdale Counties, 1949	15
II. Grain Production and Sales of Selected Lenawee and Hillsdale County Farms, 1954	16
III. Relative Importance of Various Market News Media to Lenawee-Hillsdale Farmers	36
IV. Importance of Various Radio Programs as Source of Grain Marketing Information to Lenawee-Hillsdale Farmers	38
V. Importance of Various Newspapers as Source of Grain Marketing Information to Lenawee- Hillsdale Farmers	41
VI. Importance of Various Farm Magazines as Sources of Grain Marketing Information to Lenawee-Hillsdale Farmers	42
VII. Average Michigan Wheat Prices by Months, 1947-1954	61
VIII. Annual Use Cost of a 1,000 Bushel Steel Grain Bin	65
IX. Cost of On-the-Farm Wheat Storage, August to December	67

LIST OF FIGURES

Figure	Page
1. Location of Lenawee and Hillsdale counties	11
2. Index of corn acreage and production in Lenawee and Hillsdale counties, 1945-1954	18
3. Index of wheat acreage and production in Lenawee and Hillsdale counties, 1945-1954	20
4. Index of oat acreage and production in Lenawee and Hillsdale counties, 1945-1954	21
5. Index of soybean acreage and production in Lenawee and Hillsdale counties, 1945-1954	23
6. Index of barley acreage and production in Lenawee and Hillsdale counties, 1945-1954	25
7. Location of elevators and flour and feed mills in Lenawee and Hillsdale counties	27
8. Seasonal price variation of wheat in Michigan, 1947-1954	60

CHAPTER I

INTRODUCTION

One of the newest programs of the Michigan Cooperative Extension Service in its expanding effort to fulfill its obligation is the district marketing agent. Five of these agents are now working within the state. These agents are pioneers. There is little precedent or accumulation of experience on which to build their activities. There is, of course, a wealth of extension experience on which they can draw, but little within this specific endeavor.

The Smith-Lever Act of 1914 states that the purpose of the Cooperative Extension Service is "to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics." Thus we see that the Congress in establishing this service intended that its primary purpose was to be diffusion of information. It is an educational agency. The Extension Service has promoted, over the years, the concept of education which attempts to develop the farmer's ability to solve his own problems. Helping people to help themselves should be the goal of extension education.

Education is based upon knowledge. Thus the prerequisite of a successful extension program is the gathering and evaluation of available information which can be used in a meaningful manner by extension personnel. There is a vast area of nonexistent or incomplete information which would be useful in an extension program. This thesis is an attempt to answer part of that need.

Purpose of the Study

The question is asked, as it should be with any new endeavor, of the utility of the district marketing agent. What are the problems he is supposed to solve and how can he solve them? This study was devised to answer this problem by specifically considering the grain marketing portion of the job of the livestock and grain marketing agent in the district comprised of Lenawee and Hillsdale counties. The results of the study are particularly applicable to this position but also are in general applicable to all district marketing agents. In addition to the primary purpose of the study there were several secondary purposes. These secondary purposes, when considered together, form a base upon which the grain marketing agent of the Lenawee-Hillsdale district can build.

Grain production and sales. A grain marketing agent can be of assistance only in a grain-producing area. Therefore, the first

part of the study sought to determine the amounts and kinds of grain produced in this district. The trend of production and sales was necessary in order that an estimation of the future needs for marketing and storage facilities might be made.

Timing of grain sales. The belief that farmers could realize a greater net return by storing their products to await a more favorable market is widely held. Some of the things involved in making the storage decision were given consideration.

Grain marketing facilities and alternatives. There are several alternatives for marketing grain in these counties. We ordinarily think of grain as being marketed by the farmer at the local elevator. This is the primary method of grain disposal, but there are others. The proper method for each farmer will depend upon his specific conditions. However, it is possible to point out the alternatives available and the relative merits of each.

Market news. Farmers cannot make logical marketing decisions unless market reports and other marketing information are readily available. Therefore, the availability of this information to the farmers of these counties was determined. The means of dissemination of market news which are available to a marketing agent were also considered.

Marketing agent. The results obtained through these secondary objectives of the study should be useful to the grain marketing agent as a basis for future activities. It was necessary to determine the present situation in the district but the greater aim was to evaluate the situation and discuss ways in which a marketing agent could help farmers in the marketing of their grain. The primary consideration in improvement is to increase the farmer's net return. However, improvement of the grain marketing facilities is also a logical objective for one interested in this subject and it was given consideration.

Scope of the Study

This study was limited to the farm and elevator phases of grain marketing in Lenawee and Hillsdale counties and the ways a grain marketing agent could benefit the farmers of these counties. This particular area was chosen because it was believed that it would be the first area of endeavor of the new marketing agent.

Sources of Data

The data used in this study can be placed in the four categories of production, sales, storage, and market information. Production data were needed to show the total size of the grain marketing problem in

the area. All of the grain produced is marketed in some form, the most important being through the feeding of livestock. Since this figure is not always given as a part of the grain marketing total, it was deemed wise to determine total production and production trends of these counties.

Storage data were needed to determine whether farmers were using storage effectively to secure highest returns.

Market information is the key to the entire study. In its broad sense it includes all the data used in and developed by this study, production, sales, and storage being component parts. All of the activities of a marketing agent hinge on his ability to discover, digest, and disseminate marketing information.

Several sources of secondary data were used in this study. Foremost among these were the annual Michigan Agricultural Statistics which are issued by the Michigan Department of Agriculture in cooperation with the United States Department of Agriculture. The census reports of the United States Department of Commerce which are compiled for every fifth year were also extensively used.

Since there was a large amount of information which was considered necessary and could not be obtained from secondary sources, primary data were obtained through two surveys conducted in Lenawee and Hillsdale counties. The first of these was a survey of the existing

grain elevators of the district. Names and addresses of the elevators of the district were obtained from Clarence Prentice, Director, State Agricultural Stabilization and Conservation Office, and Miles Nelson, Chief of the Bureau of Foods and Standards, Michigan Department of Agriculture.

Questionnaires¹ were sent to each of these elevators in mid-March, 1955, and a follow-up letter was sent five days later. Seven of the twenty-seven elevators returned these questionnaires. In the latter part of March and early April each of the elevators that failed to answer was visited by the author in an attempt to get a reply from every elevator of the district. Nearly all of the elevator managers were very cooperative. However, two who had agreed to return the questionnaires at a later date failed to do so.

The second survey was designed to obtain information and opinions from farmers.² This was conducted in May of 1955, and was made jointly with Harvey J. Elliott,³ who was working on a livestock marketing problem in the same district. Two farmers from each township of the district were interviewed, making a total of

¹ See Appendix I for questionnaire used.

² See Appendix II for questionnaire used.

³ Graduate student, Agricultural Economics Department, Michigan State University.

seventy-six interviews. The names of farmers to be interviewed were chosen at random. This was done by choosing the names of the first two farmers on each page of the county directories. The result was a list of approximately ten farmers in each township. The county agents were asked to pick from the list for each township of their respective counties a livestock farmer and a farmer who would be expected to sell a large part of his grain. In those cases where the county agent was not sufficiently well acquainted with the farmers listed, any two farmers were chosen from the list.

This survey did not, and was not expected to, give a statistically reliable sample. However, it did produce the desired results. It gave a good indication of the marketing information going into farm homes in the area and which information was actually used. It also gave an indication of where farmers were selling their grain and why they chose these places. In addition to obtaining data on marketing information and markets, it gave an opportunity to get the farmer's opinions concerning grain marketing in this area.

Summary

The Michigan Cooperative Extension Service in its expanding efforts to serve the people of Michigan has placed five district marketing agents at various locations within the state. These agents have

a wealth of extension experience upon which they can draw, but little within this specific endeavor. This study was devised as a means of assisting these marketing agents by considering one phase of the job of the livestock and grain marketing agent in the Lenawee-Hillsdale district.

There were several secondary objectives to this study, all of which are parts of the primary purpose. The production trends of the most important grain crops of the district were determined as a means of estimating future crops. The storage decision was given consideration in the issue of when grain should be marketed. The grain marketing facilities and alternatives were located and discussed. The availability of market news and information to the farmers of the district was determined. The news services the marketing agent has available to spread his information to these farmers were also given.

The study was limited to the farm and elevator phases of grain marketing in Lenawee and Hillsdale counties and the ways a grain marketing agent could benefit the farmers of these counties.

The data used in the study were obtained from several sources. The most used secondary sources were the annual Michigan Agricultural Statistics and census reports of the United State Department of Commerce.

Primary data were obtained through two surveys. The first of these was a survey of the elevators of the district. This gave information concerning the locations of the elevators and flour and feed mills in the district, the facilities available at each of these elevators, the amount of commercial storage space in the district, and the grain storage charges at these elevators.

The second survey was designed to obtain information and opinions from farmers. In this survey two farmers were selected from each township in the district, making a total of seventy-six. This gave a good indication of the marketing information going into farm homes in the area and which information was actually used. It also gave an indication of where farmers were selling their grain and why they chose these places.

CHAPTER II

LENAWEE AND HILLSDALE COUNTIES

Lenawee and Hillsdale counties are located in southeastern Michigan in one of the most productive agricultural sections of the state (Figure 1). An indication of the agricultural importance of these counties can be seen in the average income from all farm products sold of \$17,272,347 in Lenawee County and \$9,986,702 in Hillsdale County in 1949,¹ as compared with an average of \$5,706,157 for all counties of Michigan. The largest sources of farm income of these counties in 1949 were livestock and dairy, which accounted for 32 percent and 27 percent of the total, respectively. Field crops sold accounted for \$7,098,375, or 26 percent of the total. Eleven percent of the farm income was from the sale of poultry and poultry products.

There are approximately 1,355 square miles, or 867,200 acres, in the district. There were 7,067 farms in the district in 1949, of which 5,484 were classified as commercial. These farms were

¹ U. S. Bureau of Census, U. S. Census of Agriculture: 1950. Volume I, Counties and State Economic Areas, Part 6, County Table 6, U. S. Government Printing Office, Washington 25, D. C., 1952.

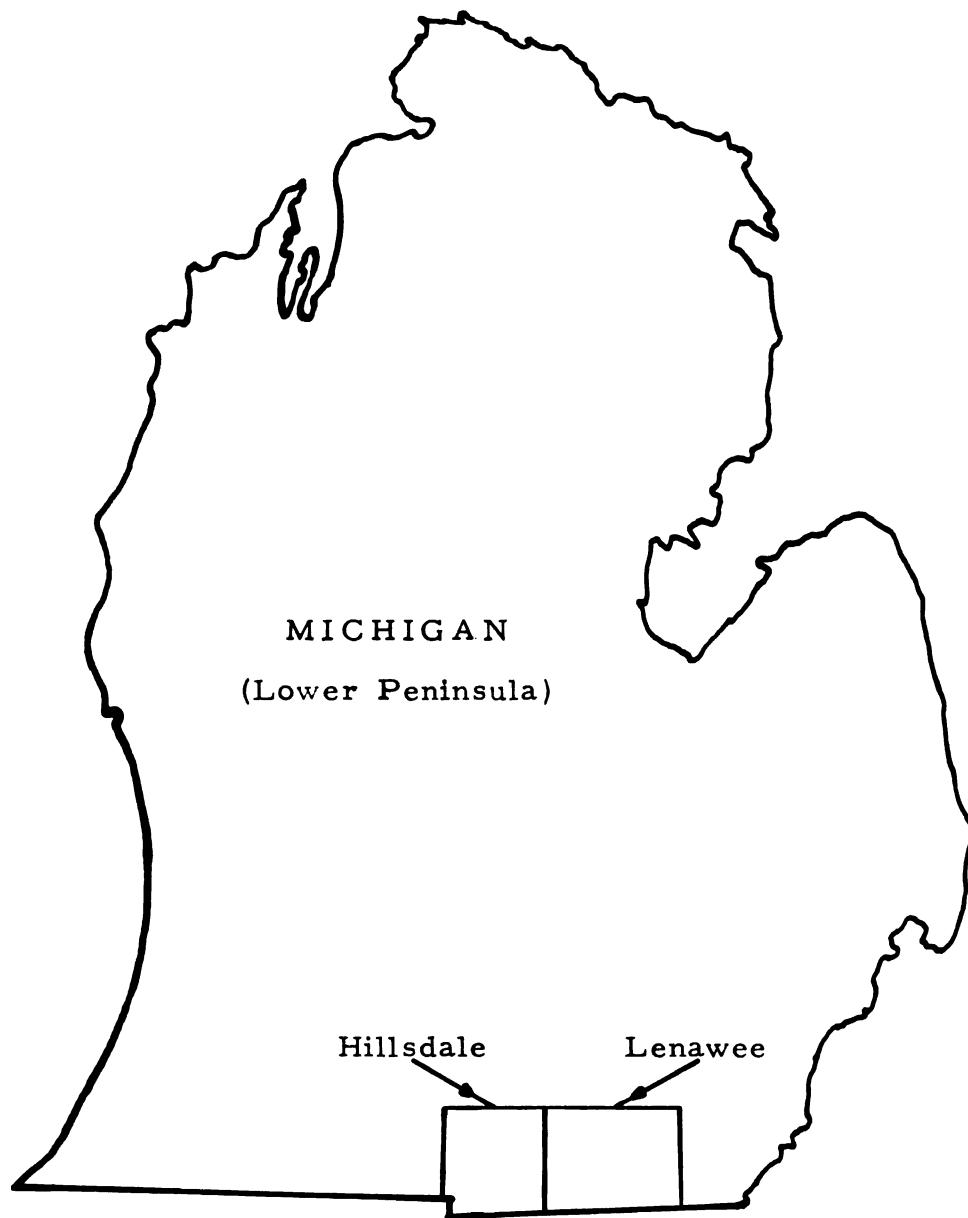


Figure 1. Location of Lenawee and Hillsdale counties.

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comprised of 766,000 acres, and from them 446,000 acres of crops were harvested.¹ The farms in Hillsdale County averaged 104 acres in 1949, while those in Lenawee County averaged 113 acres. Lenawee County farms increased in size by 3 percent from 1944 to 1949, while Hillsdale County farms decreased in size by 6 percent in the same period.² There is a tendency toward larger commercial farms and also more small part-time farms in both counties. Over 88 percent of the land area is in farms and 74 percent of the farmland is tillable. Only about 16 percent of the farms of the district are operated by tenants. Sixty-five percent of the farms had telephones in 1949, 76 percent had running water, and 95 percent had electricity. There were 8,402 tractors on farms in this district in 1949, with about 74 percent of the farms having one or more tractors.

The soil varies from level highly productive clays and silt loams to moderately rolling sandy loams. The soil of the southeastern area of Lenawee County is mostly silt loam, clay loam, and clay. This area is very productive when it is properly drained. The

¹ U. S. Bureau of the Census, County and City Data Book, 1952, A Statistical Abstract Supplement, Table 3, U. S. Government Printing Office, Washington 25, D. C., 1953.

² How Does Your County Rate? Department of Land and Water Conservation, Michigan State College, July, 1954.

northwestern section of Hillsdale County has level to rolling well-drained sandy loams. This soil is moderately productive, quite responsive to barnyard manure, green manure, and commercial fertilizer. It is adapted to a wide variety of crops. The soil of the area between these two sections is mostly clay loam, silty clay loam, or clay, and is level to rolling. Drainage is a problem except on the slopes, but the area is moderately productive, and suitable for corn and small grains.

The total population of the district in 1949 was 96,545. Over two-thirds of the district's population was in Lenawee County. The population of the district in 1950 was 34 percent urban, 36 percent rural nonfarm, and 30 percent rural. In the decade before 1950 the district population increased over 17 percent. Percentagewise, the farm population increased about the same as the total population.

The county seat and largest city of Lenawee County is Adrian. This city had a population of 18,393 in 1950. The city of Hillsdale is the largest city and county seat of Hillsdale County. It had a population of 7,297. Both cities are located near the center of their respective counties.

Grain Crops and Their Importance

Grain crops were exceeded in amount of cash sales in Lenawee and Hillsdale counties only by livestock and dairy products. An indication of the importance of the six leading grain crops is given in Table I.

The findings of the farm survey (Table II) correspond very well with Table I in the case of corn, oats, wheat, and soybeans, regarding sales as a percentage of production. They are based on too few farms producing barley and rye to be accurate for these crops. The farm survey brought out the fact that wheat and soybeans were the grains commonly grown as cash crops while corn and oats were primarily feed grains with sales depending upon feed requirements.

Corn. This was the most important crop of the area on the basis of production, and was exceeded only by wheat in value of cash sales. Of the seventy-six farmers interviewed in the district, every one raised corn, but only forty of them sold any part of their corn (Table II), and this amounted to only 29 percent of the total production. It was not generally grown as a cash crop, being raised primarily for livestock feed. In 1953, Lenawee County was first and Hillsdale County ranked third among the counties of Michigan in corn production.

TABLE I
GRAIN ACREAGES, PRODUCTION, AND SALES IN LENAWEЕ
AND HILLSDALE COUNTIES, 1949

Crop	Acres	Pro- duction (bushels)	Sales (bushels)	Pct. Sold	Value of Sales (\$)
Corn (for grain)	136,514	7,989,409	1,772,564	22	1,977,707 ^a
Wheat	78,100	1,903,000	1,611,449	84.7	2,916,723
Oats	105,000	2,405,000	459,956	19.1	312,770
Soybeans (for beans)	13,150	364,000	N.A.	N.A.	681,893 ^b
Barley	600	13,800	2,842	20.6	2,785
Rye	1,151	19,068	3,975	20.9	4,889

N.A. = not available.

^a Includes all corn products sold.

^b Value of all soybeans harvested for beans.

Source of information: 1950 Census of Agriculture.

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TABLE II

GRAIN PRODUCTION AND SALES OF SELECTED LENAWEЕ
AND HILLSDALE COUNTY FARMS, 1954¹

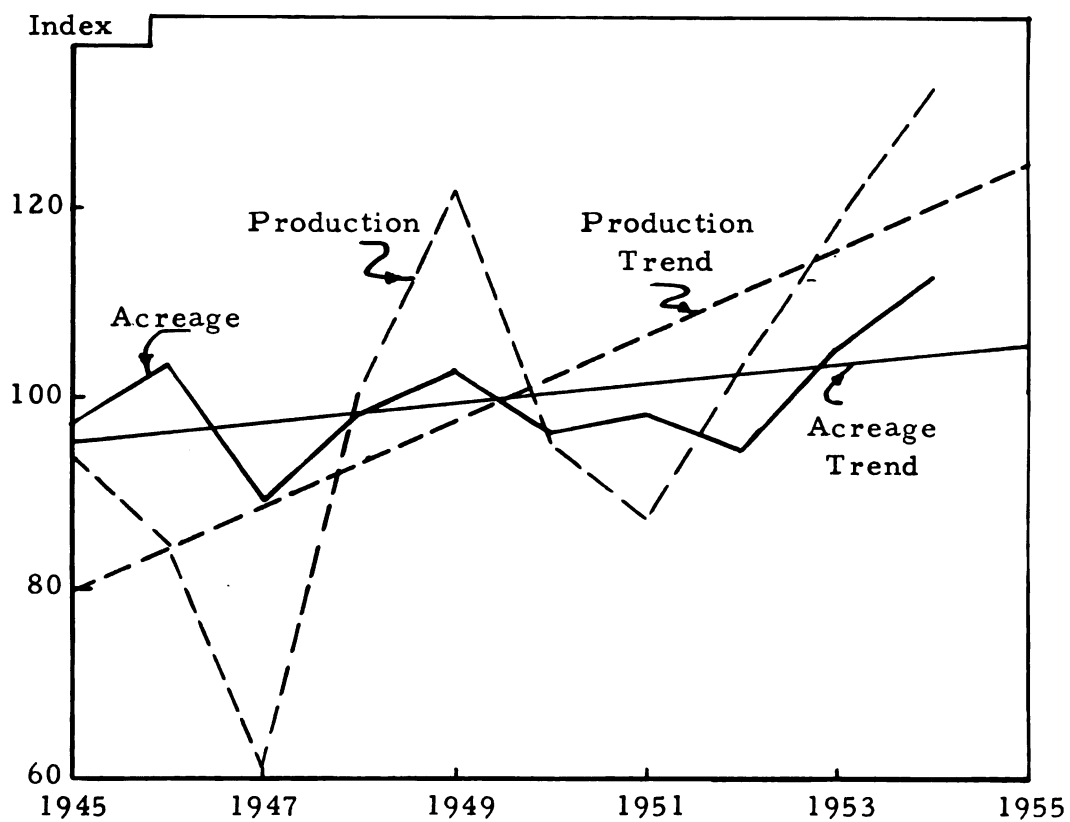
Grain	Farms Re- porting Pro- duction	Farms Re- porting Sales	Avg. Pro- duction per Farm	Avg. Pro- duction per Farm Reporting Pro- duction	Avg. Sales per Farm	Avg. Sales per Farm Re- porting Sales	Sales as a Per- centage of Pro- duction
	(pct.)	(pct.)	(bu.)	(bu.)	(bu.)	(bu.)	(pct.)
Corn . . .	100	53	2598	2598	750	1424	29
Wheat . .	79	72	450	570	389	538	86
Oats . . .	88	25	775	879	96	383	12
Soybeans.	17	16	124	723	118	749	96
Barley . .	4	0	5	127	0	0	0
Rye	7	4	10	149	4	100	40

¹ Source of data: Farm Survey (see page 6).

The importance of corn in this area was undoubtedly due to the comparatively long and more favorable growing season than prevails in most of the state.

Corn production in Lenawee and Hillsdale counties has increased steadily since 1930. The recent trend of both production and acreage is shown in Figure 2. It is interesting to note the moderately increasing acreage trend but rapidly increasing production trend. This is due to the adoption of new and improved corn varieties and production techniques. It appears from the long-time (1920-1950) and recent (1945-1954) trends that production will continue to increase. However, government acreage restrictions may change the trend or at least alter it to a certain degree.

Wheat. Wheat furnished a major source of income to farmers of these counties. It was their most important crop on the basis of cash sales. Fifty-five of the sixty farmers reporting production of wheat in the farm survey also reported wheat sales. Their sales amounted to 86 percent of the total production. In 1953, Lenawee County ranked second and Hillsdale County ranked seventeenth among Michigan counties in wheat production. There has been a trend toward increasing wheat acreage since 1925, but this has not been a consistent increase. There has also been a moderately increasing



Index: 1945-1954 = 100.

Source of data: Annual Michigan Agricultural Statistics.

Figure 2. Index of corn acreage and production in Lenawee and Hillsdale counties, 1945-1954.

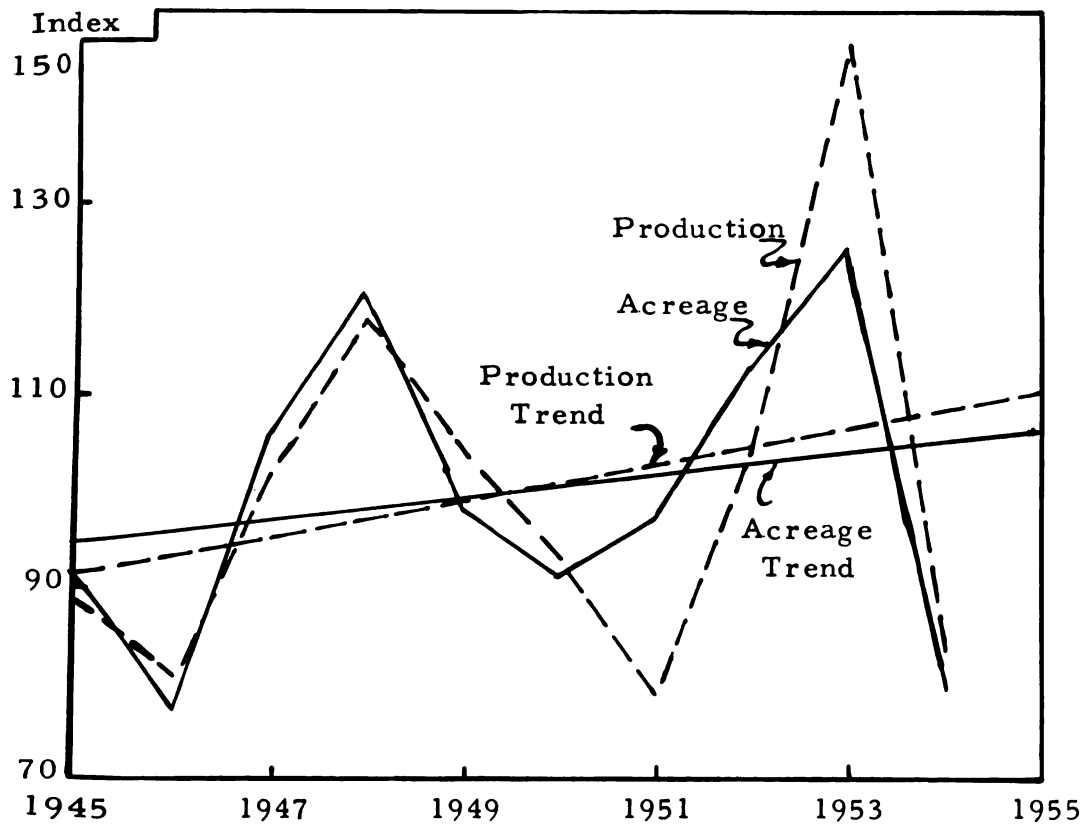
acreage trend in the years 1945-1954 (Figure 3), and a slightly greater increase in production. However, wheat acreage and production have varied to such an extent from year to year that the straight-line trend is not valid for prediction of future crops. Wheat acreage dropped from a record high of 101,000 acres in 1953 to 64,000 acres in 1954, a change of over 36 percent. This drop is explained by government acreage restrictions.

Oats. This was the only important grain crop in the Lenawee-Hillsdale area which had a decreasing acreage trend. It was also one of the few crops having decreasing yields as shown by the production trend line (Figure 4). The yields are relatively stable, though, with the exception of 1946 which was an unusually good year. Oat acreage decreased from a high of ninety-five thousand acres in 1924 to a low of sixty-six thousand acres in 1944.¹ By 1949 this had recovered to ninety thousand acres but has declined since then.

Oats, even more than corn, was a feed crop rather than a cash crop. It is a comparatively low-value crop which has been extensively grown in this area because of its use in rotations with other crops, especially corn, which are raised there. The farm

¹ U. S. Census of Agriculture, 1920-1950.

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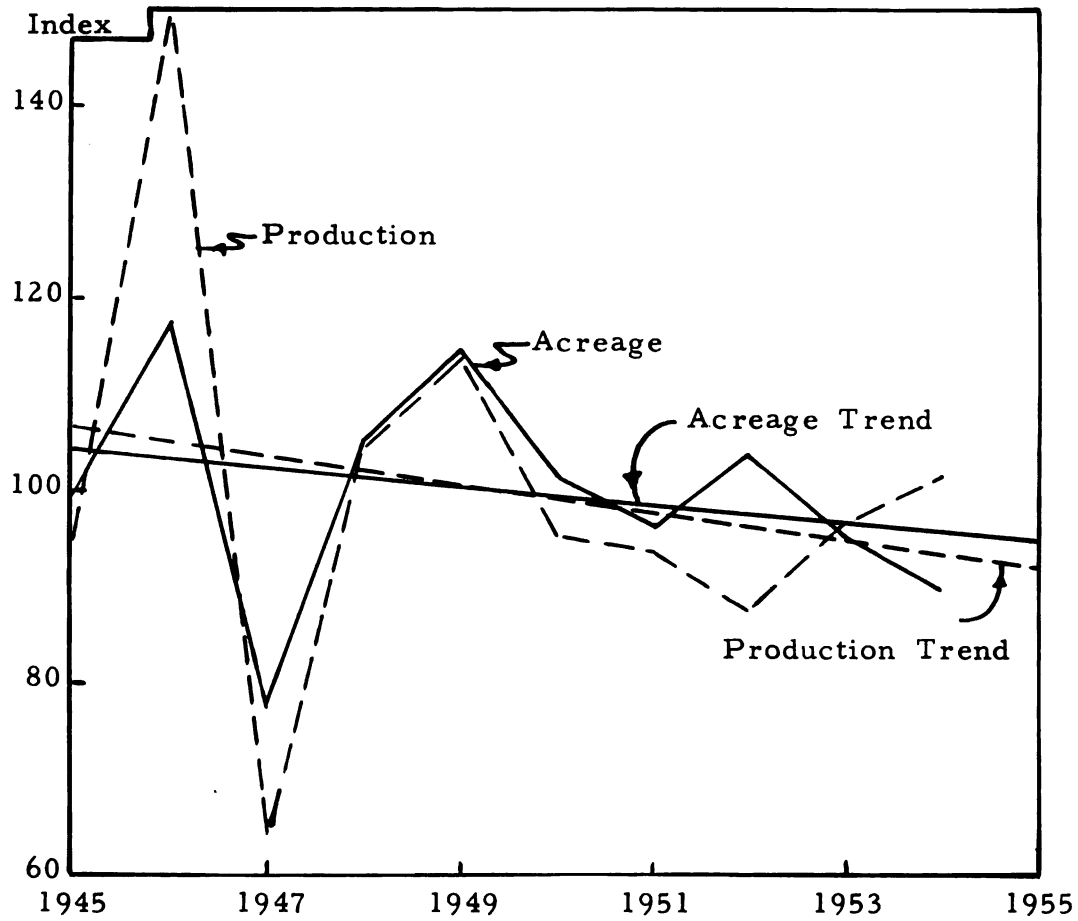
Index: 1945-1953 = 100

Source of data: Annual Michigan Agricultural Statistics

Figure 3. Index of wheat acreage and production in Lenawee and Hillsdale counties, 1945-1954.

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Index: 1945-1954 = 100

Source of data: Annual Michigan Agricultural Statistics

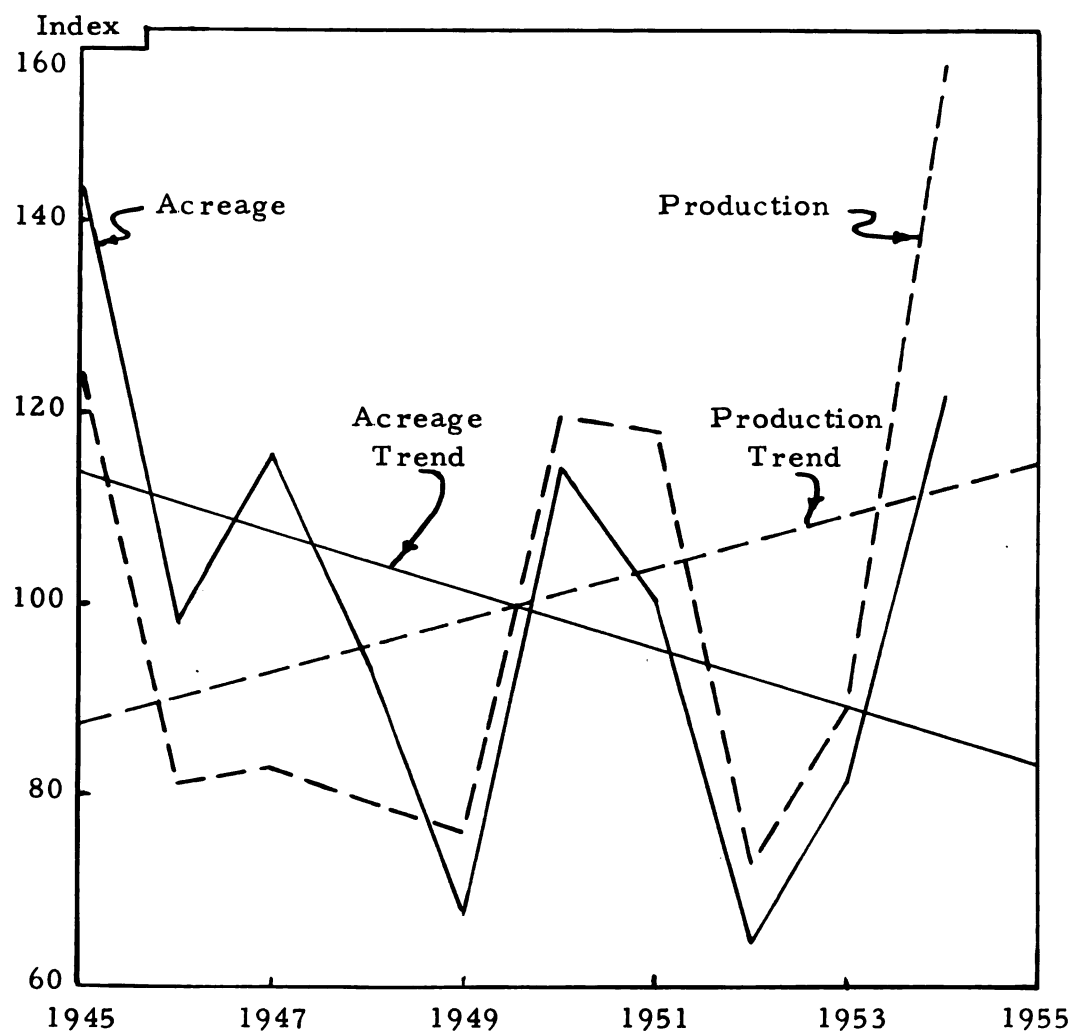
Figure 4. Index of oat acreage and production in Lenawee and Hillsdale counties, 1945-1954.

survey showed that although sixty-seven of the seventy-six farms produced oats, only nineteen of these sold any part of the crop. Furthermore, only 12 percent of the oat crop was sold for seed or grain.

The acreage of this crop is quite stable and can thus be fairly accurately predicted on the basis of the recent acreage and trend. The probability is that oat acreage will continue to decline slightly or remain at about its present level.

Soybeans. Although soybeans were raised on only 17 percent of the farms (Table II), it was an important cash crop to farmers of this area. It was especially notable for its high percentage of sales.

Soybean acreage and production trends are unusually interesting. There was a long-time (1920-1950) increasing but recent (Figure 5) decreasing acreage trend. However, there has been a trend toward increasing total production despite the decreasing acreage. As can be seen in Figure 5, soybean acreage has been exceptionally variable. It would be impossible to predict future acreages or production on the basis of the trend lines. A better indication can be derived from the acreage restrictions which may be put on corn and wheat, since soybeans are a substitute crop for both of these. The 1954 increase in soybean acreage coincides with the 1954 decrease in wheat acreage.



Index: 1945-1954 = 100

Source of data: Annual Michigan Agricultural Statistics

Figure 5. Index of soybean acreage and production in Lenawee and Hillsdale counties, 1945-1954.

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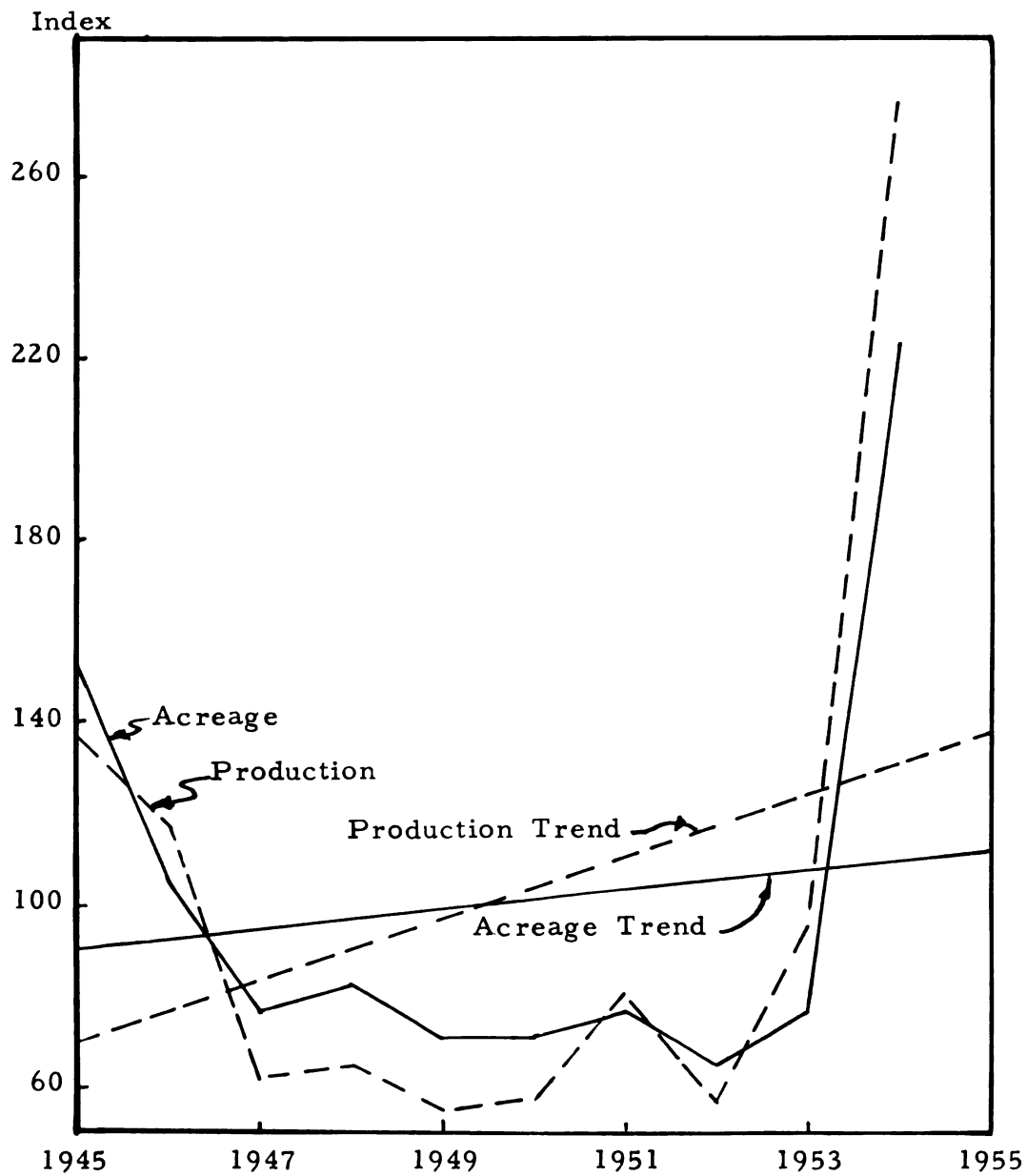
Barley. Barley was a relatively unimportant crop in this area, as shown in Table I. The long-time trend has been toward a decreasing acreage. In 1929 there were 17,608 acres of barley raised in the two counties, but by 1949 this had dropped to 657.¹ The average barley acreage from 1947 to 1953 was about 630 acres.² It appeared that it was to remain at this level which would make it of practically negligible importance. However, probably due to wheat acreage restrictions, barley suddenly increased in 1954 to 1900 acres from the 650 acres of a year earlier. This increase causes barley to have a recent increasing acreage trend (Figure 6) which would seem to be misleading. It seems safe to predict that barley acreages will depend to a very large extent upon the wheat allotments and that if crop restrictions are removed, barley will again become unimportant to the farmers of the area.

Rye. This crop was not extensively grown for grain in Lenawee and Hillsdale counties, yet it was more widely produced than barley. Rye is an unimportant crop in Michigan as a whole; therefore, the Michigan Crop Reporting Service does not compile annual

¹ U. S. Census of Agriculture, 1930-1950.

² Michigan Agricultural Statistics, 1947-1953.





Index: 1945-1954 = 100

Source of data: Annual Michigan Agricultural Statistics

Figure 6. Index of barley acreage and production in Lenawee and Hillsdale counties, 1945-1954.

1

data for rye on a county basis. Because very little annual information on rye production and sales was available, the recent trends could not be calculated. On the basis of the Census of Agriculture reports, the long-time trend of rye production has been decreasing in these counties in a manner very similar to barley. It seems logical to assume that it would also have increased in 1954 and should continue to do so in 1955. The farm survey, although not statistically acceptable in the case of rye, does indicate that rye was of relatively the same importance with respect to barley as it was in 1949 as reported by the 1950 Census of Agriculture.

Marketing Facilities

There were many grain marketing facilities available to the farmers of this area. Figure 7, which shows the locations of the grain elevators and the flour and feed mills of the two counties, gives evidence of this. At first glance it would appear that the area was well supplied with grain buyers and that very little grain would move outside the area to the first buyer. This evidently was not the case, though, for a very substantial amount did move outside to a few large elevators.

Elevators in the area. There were a total of twenty-seven grain elevators and processors in this district. These ranged in

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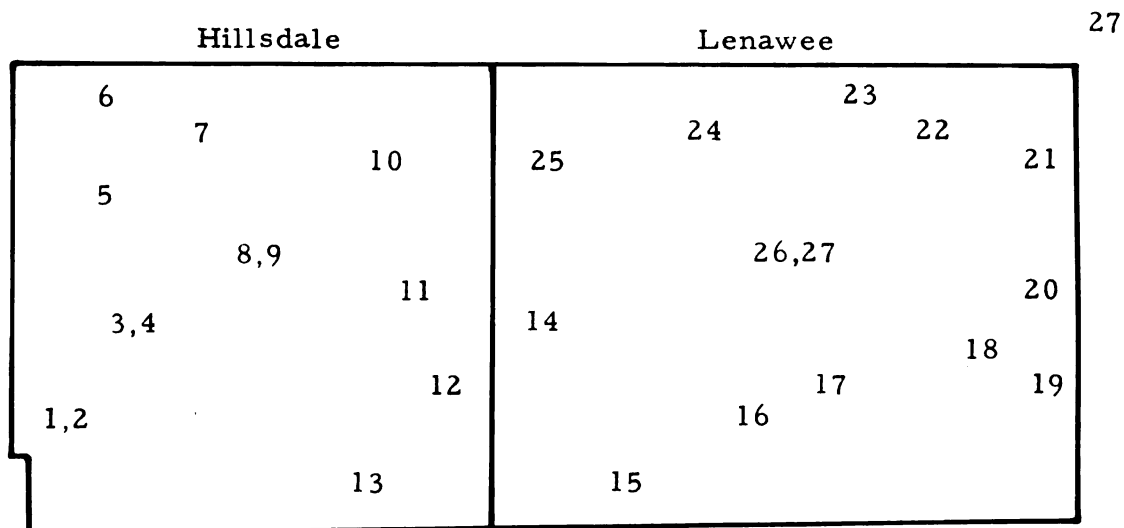


Figure 7. Location of elevators and flour and feed mills in Lenawee and Hillsdale counties.

KEY

Hillsdale County

1. Mitchell and Company, Montgomery
2. Tri-State Cooperative Association, Montgomery
3. Reading Feed Mill, Reading
4. Reading Cooperative Company, Reading
5. H. Van Patten Company, Allen
6. Litchfield Grain Company, Litchfield
7. C. S. Bater Company, Jonesville
8. F. W. Stock and Son, Hillsdale
9. Scoville Bros., Hillsdale
10. Williams Mill, North Adams
11. Pittsford Mills, Pittsford
12. Prattville Grain and Lumber Company, Prattville
13. Waldron Elevator Company, Waldron

Lenawee County

14. Hudson Elevator, Hudson
15. Morenci Elevator Company, Morenci
16. Blissfield Cooperative Company, Jasper
17. Blissfield Cooperative Company, Ogden Station
18. Blissfield Cooperative Company, Blissfield
19. Blissfield Cooperative Company, Riga
20. Deerfield Cooperative Association, Deerfield
21. J. J. Walper and Son, Britton
22. Hayden Flour Mills, Tecumseh
23. Atlas Milling Company, Clinton
24. H. E. Branch and Son, Onsted
25. Addison Milling Company, Addison
26. Cutler-Dickenson Company, Adrian
27. Adrian Grain Company, Adrian

size from the very small elevators which purchased only enough to furnish farmers who wished to buy, to a large flour mill which handled more wheat¹ than the entire production of Lenawee and Hillsdale counties in 1954. Of the twenty-seven elevators in the area, only eleven handled over 100,000 bushels of grain in 1954, and only seventeen handled 50,000 bushels or more. This is significant when compared with the four million bushels of grain which were probably sold from farms in these counties in the same year.

The elevator survey showed that the elevators in these counties were primarily small, local feed mills where grain buying and selling was of rather minor importance. Most of the large grain-buying elevators were located in the southeastern section of Lenawee County. There were only seven cooperatively owned elevators in the entire district and five of these were located in southeastern Lenawee County. Four of the cooperative elevators are operated by the Blissfield Cooperative Company.

Each farmer interviewed in the farm survey was asked why he chose the place he did to sell his grain. The reason most often given by those selling to local elevators was convenience, with higher

¹ Part of this wheat is grown in Lenawee and Hillsdale counties but most of it comes from other areas.

net price received being of practically equal importance. Only five farmers of the seventy-six interviewed said that they sold to a co-operative because they were members. Other reasons for selling to local elevators were that there was less dockage (2),¹ custom (4), and that storage was available there (1). These farmers appeared to have definite opinions when asked this particular question, and in most cases gave the answer with very little hesitation. Even though it was sometimes true that they had conflicting reasons for selling at a particular elevator, there was nevertheless an evidence of having thought this through before selling. It appears that they need, primarily, the right information on which to base those decisions.

Elevators outside the area. There were several elevators outside the district at which Lenawee-Hillsdale farmers sold their grain. The one most often used by farmers interviewed in the farm survey was the Anderson Truck Terminal at Maumee, Ohio. The Fayette Elevator at Fayette, Ohio, was also important to farmers of the area. Seven other elevators were mentioned by these farmers, but none of them was given more than four times. The Michigan Elevator Exchange operates an elevator of four million bushel storage

¹ Number of times the reason was given.

capacity at Ottawa Lake, in Monroe County. A large share of the Lenawee-Hillsdale grain is placed in storage at this elevator. However, all of the grain stored there is handled either physically or for record purposes by a local elevator. If a farmer delivers grain directly to this elevator he must have a storage order from a local elevator. The records on his grain are then maintained by the local elevator. Nine Lenawee-Hillsdale elevators are affiliated with the Michigan Elevator Exchange.

The farmers interviewed were asked why they sold to these elevators outside the district. The reason most often given (eighteen times) was the higher price received for their grain. Other reasons given were cheaper storage, drying facilities available, less dockage, less waiting to unload, and that the hauler ordinarily went to that elevator.

Other grain buyers in the district. The elevators in and near the district were the primary grain buyers. However, there were three flour and feed mills which used a considerable amount of grain. These were located at Clinton and Tecumseh in Lenawee County and Hillsdale in Hillsdale County.

The only other grain sales methods reported in the district were sales to farmers for feed and seed.

Summary

Lenawee and Hillsdale counties are located in southeastern Michigan in one of the most productive agricultural sections of the state. Field crops sold accounted for \$7,198,375, or 26 percent of the total income from farm products in this district in 1949. Only livestock and dairy products exceeded field crops as sources of farm income.

Corn was the most important crop of the area on the basis of production, and was exceeded only by wheat in value of sales. Corn was produced primarily as a feed crop. The recent trends were toward moderately increasing acreage and rapidly increasing production.

Wheat was the most important cash grain crop in this district. Lenawee County ranked second and Hillsdale County ranked seventeenth among the Michigan counties in wheat production in 1953. Wheat acreage and production has varied greatly but the recent and long-time trends were toward increasing acreage and production. Government acreage controls governed wheat acreage at the time of this study, so the production trend had little validity.

Oats were decreasing in both acreage and total production. This is a comparatively low-value crop which was produced primarily for feed. Soybeans had a recent decreasing acreage, but increasing

production trend. Soybean production was exceptionally variable. Barley and rye were relatively unimportant crops in this district. Their long-time trend had been toward decreasing acreage and production. They made large increases in acreage in 1954, but this can be attributed to acreage restrictions on wheat.

Government acreage restrictions on one or two grains would be likely to alter acreages of all of the major grain crops of this district. A decrease in wheat acreage, for instance, would probably be reflected in increased acreages of soybeans, barley, and rye.

There were many grain marketing facilities available to the farmers of this district. There were twenty-seven elevators and flour and feed mills located within the district. These ranged in size from the very small elevators which purchased only enough grain to furnish farmers who wished to buy, to a large flour mill which handled more wheat than the entire production of Lenawee and Hillsdale counties in 1954. It would appear that there are sufficient grain marketing facilities within this district. However, this is evidently not the case for a substantial amount of grain did move outside the district to the first buyer. The farmers interviewed in the farm survey reported sales to nine elevators outside the district but only two of these were mentioned by more than four farmers.

The farmers interviewed were asked why they chose the elevator at which they sold their grain. The reason most often given by those selling to local elevators was convenience, with higher net price received being of practically equal importance. Those selling to the elevators outside the district gave the higher price received for the grain as their main reason.

The elevators within and without the district were the primary grain buyers. However, there were three flour and feed mills in the district, and a few farmers reported in the farm survey that they sold grain to other farmers for feed and seed.

CHAPTER III

MARKETING INFORMATION

There is an abundance of marketing information available to help farmers make their decisions on how, when, and where to sell their grain. This plentiful volume, however, does not assure that the farmers will have the right information available at the right time nor that they will properly evaluate and use it. The gathering, evaluation, and dissemination of marketing information will be the most consistent and valuable service a marketing agent can perform if he at the same time develops in the farmers an ability to understand and evaluate the market news in the light of their individual situations. In his efforts to fulfill his duty in this respect it will be helpful for him to know what marketing information is now available to the farmers of the district, which parts of the available information they actually use, and what kinds of information they feel would be helpful. This chapter is designed to fulfill these needs. A listing of publications which would be useful to a grain marketing agent is also included.

Farm Sources of Marketing Information

In the farm survey, each farmer was asked which of the news media he used in obtaining marketing information. If he used more than one, he was asked to rank them according to the importance of each to him. The radio was by far the most often given as first choice, being named by sixty-three of the seventy-six farmers. Radio was of greatest importance to these farmers because it allowed them to get the market news at least a day earlier than the newspapers. This was mentioned by nearly every farmer interviewed, although a few still placed newspapers first. Newspapers were most important to seven farmers, individuals to three, magazines to two, and television to one. Table III shows the relative importance of each medium. Although newspapers were not most important for marketing news to a large number of farmers they were used to some extent by sixty-four of them. Radio was used by all but two of the seventy-six farmers interviewed.

Radio was important to these farmers for the daily market reports. They liked to follow the market, attempting to sell on the short-time peaks. Many of the farmers who were interviewed felt that, although radio was most important to them because of the more timely market reports, the newspaper was also valuable because it

TABLE III
RELATIVE IMPORTANCE OF VARIOUS MARKET NEWS MEDIA
TO LENAWEE-HILLSDALE FARMERS

Medium	Number of Farmers Rating Each Medium in Importance			
	First	Second	Third	Total
Radio	63	8	3	74
Newspaper	7	45	12	64
Individual	3	11	18	32
Magazine	2	3	25	30
Television	1	5	4	10
Special market report ¹ . . .	0	2	4	6

¹ Includes private and government reports.

Source of data: Survey of seventy-six geographically selected Lenawee-Hillsdale farmers (see page 6).

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gave more complete coverage and they could give it a more leisurely and thorough study. Several mentioned the weekly farm page in daily newspapers as having some marketing information.

Magazines were considered important for market outlook material. Newspapers and radio carried very little of this type of information. Magazines, having a wide distribution, carried rather general but nevertheless partially applicable outlook digests. There was a very definite need for more outlook reports which are developed to suit the particular conditions of this area.

There were several radio stations heard in this area which have programs including grain market reports (see Table IV). However, only a few programs have a very wide audience in this district. The morning program on station WJR of Detroit was considered to be good for marketing information by more than twice as many farmers as the next most popular program. The program which was second in popularity was the noon program on the same station. One of the reasons, apparently the primary reason, for the large farm audience of this station was the personal popularity of its farm editor, Marshall Wells. The local station in Adrian, WABJ, also carried two popular farm programs featuring grain marketing information. The noon program of this station was heard by twice as many Lenawee County farmers as the program of WJR which was

TABLE IV

IMPORTANCE OF VARIOUS RADIO PROGRAMS AS SOURCE
OF GRAIN MARKETING INFORMATION TO
LENAWEE-HILLSDALE FARMERS

Station	Time	Farmers Using for Grain Marketing Information	
		Number	Percent
WJR (Detroit)	morning	50	66
WJR (Detroit)	noon	22	29
WABJ (Adrian)	morning	17	22
WABJ (Adrian)	noon	18	24
WOWO (Fort Wayne)	morning	14	18
WOWO (Fort Wayne)	noon	5	7
WKAR (East Lansing)	noon	5	7
WTBV (Coldwater)	noon	1	1
WPAG (Ann Arbor)	morning	2	3
WPAG (Ann Arbor)	noon	2	3
WLS (Chicago)	noon	1	1
WFRO (Fremont, Ohio)	noon	1	1

Source of data: Survey of seventy-six geographically selected
Lenawee-Hillsdale farmers (see page 6).

more popular in Hillsdale County. Hillsdale does not now have a radio station, but is expected to have one in the very near future. Station WOWO of Fort Wayne was the only other station used by a significant number of the farmers interviewed in the farm survey.

Only two daily newspapers were of much importance to these farmers for grain marketing information, according to the farm survey. These are divided along county lines. The Adrian Daily Telegram was read by every Lenawee County farmer interviewed and used by 78 percent of these for grain marketing information. The Hillsdale News was read by 89 percent of the Hillsdale County farmers and used by 78 percent of the total for grain marketing information. Both of these newspapers carry daily grain market reports. They also carry occasional grain marketing information of a general nature and have a weekly farm page. Many other daily newspapers were known to be received by residents of this area, but only three of them were considered to be of any importance for grain marketing information by the farmers of the farm survey. There were also several weekly newspapers published in this area. It was surprising to find that, although there were at least twelve of these newspapers, only one farmer said that he obtained grain marketing information from one of them. However, nearly half of the farmers obtained livestock marketing information from weekly newspapers.

The farmers of the farm survey are subscribers, on the average, to over four farm magazines. However, they reported that they found only half of these of any value for grain marketing information. On the other hand, nearly all of them were felt to be of some value for livestock marketing information. Farmers depend upon the radio and newspapers for the day-to-day market reports, but they look to magazines for outlook reports and trends. The magazines appear to be giving little space to grain marketing. This emphasizes the fact that there is a fertile area of endeavor for the grain marketing agent.

Although individuals were considered to be most important to only three of the seventy-six farmers interviewed, forty-two of the farmers did say that they obtained advice from this source. Elevator managers were by far the most important individuals for grain marketing advice. Truckers, neighbors, and county agricultural agents were also mentioned.

Special market reports, such as Department of Agriculture releases, and private market reports were of slight importance in this district at the time of this study. The marketing agent will be of real service to these farmers if he is able to acquaint them with the government publications containing grain marketing information. There are several private reports circulated to patrons of various

TABLE V

IMPORTANCE OF VARIOUS NEWSPAPERS AS SOURCE OF
GRAIN MARKETING INFORMATION TO
LENAWEE-HILLSDALE FARMERS

Item	Newspapers				
	Adrian Daily Tele- gram	Hills- dale News	Toledo Blade	Jackson Citizen Patriot	Chicago Daily Drovers Journal
Lenawee farmers:					
Percent receiving	100	0	13	0	3
Percent using for marketing information . . .	78	0	3	0	3
Hillsdale farmers:					
Percent receiving	11	89	3	8	3
Percent using for marketing information . . .	6	78	3	6	3
Total:					
Percent receiving	58	42	8	4	3
Percent using for marketing information . . .	43	37	3	3	3

Source of data: Survey of seventy-six geographically selected
Lenawee-Hillsdale farmers (see page 6).



TABLE VI
IMPORTANCE OF VARIOUS FARM MAGAZINES AS SOURCES
OF GRAIN MARKETING INFORMATION TO
LENAWEE-HILLSDALE FARMERS

Magazine	Farmers Receiving		Farmers Using for Grain Marketing Information	
	Number	Percent	Number	Percent
Michigan Farmer	69	91	32	42
Successful Farming	58	76	33	43
Farm Journal	54	71	37	49
Better Farming	38	50	20	26
Cappers Farmer	37	49	15	20
Hoards Dairyman	15	20	6	8
Prairie Farmer	9	12	8	11
Michigan Farm Economics .	7	9	4	5
Nations Business	7	9	2	3
Indiana Farmers Guide . . .	6	8	5	7
Nations Agriculture	4	5	3	4

Source of data: Survey of seventy-six geographically selected
Lenawee-Hillsdale farmers (see page 6).

agencies. Those which the author noted during the farm survey were the Hayden Mills folder, Anderson Truck Terminal letter, and the Walley Agricultural Service which is distributed by the Adrian and Blissfield State Banks. There are undoubtedly others.

Television was of negligible importance as a medium for marketing information in this area. Sixty-three percent of the farmers interviewed owned a television set. Only 20 percent of the total farmers interviewed and 31 percent of those owning television sets obtained any kind of agricultural marketing information from this source. Most of these watched a farm program on television only occasionally. Of the fifteen farmers who watched a farm program on television, only one considered it his most important source of marketing information, five rated it as second, and four as third. Fourteen watched the noon program on station WSPD, Toledo, and one farmer watched station WJBK, Detroit. Television is not expected to increase in importance as a source of farm marketing information. Farmers, as a general rule, cannot take the time to watch a television program unless it is scheduled to coincide with mealtime or during the evening hours. This, however, holds for many programs and the farm program is unlikely to obtain the choice television time.

News Disseminating Services Available to
the Marketing Agent

The farmers of the Lenawee-Hillsdale area were supplied with an abundance of market news sources. They received, almost without exception, a daily newspaper. Nearly every farmer listened regularly to a market report on the radio. They received many farm magazines and a few received marketing information on television.

The news disseminating service of the district was fairly efficient to a certain extent but the kinds of information given fell far short of the needs of the area. There was an apparent need for marketing information other than the daily market reports. In fairness to the newspapers and radio stations it should be stated that there seemed to be a lack of awareness on the part of the farm population, of the value of additional information. If the demand were there, the information would probably be made available. A big part of the marketing agent's job will be to stimulate that demand and then help the news services supply the desired information.

The county agricultural agents of Hillsdale and Lenawee counties assured the author that the newspapers and the radio station within the district are very cooperative. The news services are anxious for material having farmer interest. WABJ, the Adrian radio station, has a regularly scheduled extension program. Hillsdale is expected

to have a station in the very near future. The manager of this station has also been manager of station WTVB, Coldwater, and is known by the Hillsdale agent to be willing to give time to extension programs.

The daily newspapers within the district were the Adrian Daily Telegram and the Hillsdale News. Both of these carried a weekly farm page and were willing to print extension releases. The weekly newspapers were also willing to print this type of material. The farm survey indicated that they have not, in the past, been successful in distributing grain marketing news to farmers. This does not mean that they could not be useful if current marketing articles of a general nature were made available to them.

The need is present. The means of distribution is available. The marketing agent should be able to supply the need through these news services. He cannot, and should not, attempt to spread his services to news media outside his district. Nevertheless, he should take into account the information supplied to his district by these sources and supplement this with the information they fail to make available.

Publications

There are innumerable publications which would be of some help to a grain marketing agent. It is not the purpose of this thesis to give a complete listing of these publications but rather to briefly describe some of the most useful ones. The newspapers and magazines used by farmers of this district are listed on pages 41 and 42. They are important to a marketing agent both for the information they contain and to enable him to keep informed concerning the information farmers are receiving from these sources. The following is a list of publications not generally received by farmers, which contain useful marketing information. The marketing agent should promote the use of some of these by the farmers of his district. Others will be of little value to farmers, but very useful to the marketing agent as he keeps abreast of the over-all marketing situation.

Washington Farm Reporter is a weekly publication of National Agricultural Research, Incorporated, which gives a good summary of national farm politics and agricultural outlook.

The Kiplinger Agricultural Letter is a privately circulated, biweekly summary which is also good for farm legislation and agricultural outlook.

Michigan Farm Economics is a monthly publication of the Co-operative Extension Service, Michigan State University. It contains

articles of interest to Michigan farmers, including the general farm outlook, specific commodity outlooks, various economic trends, and Michigan farm product prices and ratios.

The Agricultural Outlook Digest is a one-page resume of the price and production outlook for all types of farm products. It is published by the Agricultural Marketing Service, United States Department of Agriculture.

Agricultural Prices is a monthly publication which is useful for keeping in touch with the entire agricultural situation. It contains data on prices received and paid by farmers, with practically no outlook information. It is published monthly by the Agricultural Marketing Service, United States Department of Agriculture.

The Demand and Price Situation is a monthly publication giving a broad, general view of the agricultural economy with specific information on many things. Some of the kinds of information given are the average level of prices received by farmers, the parity ratio, general economic activity, consumer incomes, agricultural outlook, present agricultural supplies and prices, present exports and export outlook, and various commodity prices, production, and outlook. It would be helpful in fitting the grain situation and outlook into the over-all agricultural picture. It is published by the Agricultural Marketing Service, United States Department of Agriculture.

Michigan Crop and Livestock Report is a one-page summary of Michigan agricultural production prospects. It is issued monthly by the Michigan State Department of Agriculture in cooperation with the United States Department of Agriculture.

Statistical Summary is issued monthly by the Agricultural Marketing Service, United States Department of Agriculture. It gives information on crop production, prices, and outlook.

The Feed Situation is an excellent publication of the Agricultural Marketing Service, United States Department of Agriculture. It contains information concerning United States feed grain stocks, grain stocks abroad, feed grain prices, production, outlook, and trends and livestock feed ratios. It is published approximately every second month.

The Fats and Oils Situation is issued approximately bimonthly by the Agricultural Marketing Service, United States Department of Agriculture. It contains information pertaining to fats and oils similar in nature to that contained in The Feed Situation for feed grains. It would be useful to a marketing agent in the Lenawee-Hillsdale area because of the soybean production.

Crop Production is a periodical publication of the Crop Reporting Board, Agricultural Marketing Service, United States Department

of Agriculture. It is useful for its information on acreages planted, crop conditions, and amounts harvested.

The Grain Quarterly is the official publication of the National Federation of Grain Cooperatives. It is a quarterly periodical containing articles of current interest to the grain trade.

Summary

There was an abundance of marketing information available to Lenawee-Hillsdale farmers. In the farm survey each farmer was asked which radio and television programs were useful to him for marketing information, which magazines, newspapers, and special market reports he received, and what individuals he consulted for marketing advice.

Radio programs were found to be the most important source of marketing information to these farmers. Radio was followed in importance by newspapers, magazines, individuals, television, and special market reports.

One radio station, WJR of Detroit, was outstanding for the size of its audience. Station WABJ, Adrian, was also widely listened to in this area. The Adrian Daily Telegram and the Hillsdale News were the only newspapers of significance. Together, they had nearly 100 percent coverage in these counties. Weekly newspapers are at

present of negligible importance for grain marketing information. Individuals, primarily elevator operators, were of some importance but television and private and government market reports were used very little by the farmers of this district.

There are many good sources of marketing information which are not now used by Lenawee-Hillsdale farmers. The marketing agent should promote the direct use of some of these by the farmers. Others will be of little value to the ordinary farmer but very useful to the marketing agent as he keeps abreast of the over-all marketing situation.

CHAPTER IV

THE DISTRICT GRAIN MARKETING AGENT

The ultimate aim or purpose of a district marketing agent is to aid the farmers of his district in their efforts to obtain larger net returns from their products. There are undoubtedly many ways in which he could help farmers realize more from their grain. He should perhaps work closely with the elevator operators to help improve their services. Fortunately, there seemed to be a very co-operative group of elevator operators in this district. Possibly he will find that some of these elevators cannot or will not provide needed services and that a farmer cooperative is needed. This decision would require study and analysis far beyond the scope of this thesis. Nevertheless, such a venture is now being considered by one group in the area and the agent will undoubtedly be called upon for advice and help.

Other ways in which he can be of service are to provide information to farmers concerning grain storage, expected prices, production outlook, sanitation, product quality, and varieties desired by the market.

The Marketing Problem

The marketing agent, in all his efforts to increase the farmer's net returns from grain, will be concerned with information. He must have the right information at his disposal, he must be able to correctly evaluate that information, and he must then effectively disseminate it. Only that portion of the information which is correct and which reaches the farmer at the right time, in the right form, will be useful.

In their discussion of the dissemination of information, Work Group II of the National Marketing Workshop held at Cornell University last year made the following statement:

Careful study and constant evaluation should be given to methods used in packaging and disseminating information for farmers. The farmer is a consumer of information. It should come to him in packages especially designed to meet his needs. He should be left free to make his own decisions with his eyes wide open to the various alternatives and their probable consequences.¹

This information will be of many kinds; outlook, market news, and storage being perhaps most important. The information which the marketing agent will distribute can be classified under the four

¹ Report of Work Group II, Information to Guide Producers in Adjusting Production to Market Demand, National Marketing Workshop, Cornell University, August 26 to September 3, 1954, p. 162.

parts of the marketing problem; what to produce, when to market it, where to market it, and how to market it most effectively.

What to produce. The first step in marketing is the determination of what to produce. Once a farmer has made this decision he commits resources to specific production for the period of the production cycle. The wisdom of the choice will depend upon the price situation at the time the commodity is ready for market. It must be recognized that conditions change between the time of production decisions and harvest. We cannot positively predict these changes. We can, however, make better informed decisions which are more nearly correct if we make use of the best available estimates of future conditions.

There are three categories of information the marketing agent can make available to farmers to help them in their decisions of what to produce. The first of these is the market price outlook. The aim of this is to make the best possible estimation of the value of alternative crops at the time they will be ready for market. He should be especially attentive to the need for this information at the time production decisions are being made. An evaluation of the price prospects by the marketing agent will require data and analysis which will provide an accurate appraisal of prospective demand and supply

conditions, both domestic and foreign. This information must then be localized to meet the needs of farmers in his marketing district.

Secondly, farmers need data on the physical input-output relationships of the various alternatives. Although this may not be considered a part of marketing, it is, nevertheless, essential to a logical decision of which crop, or other alternative, the farmers' productive resources should be invested in.

In addition to the market outlook and physical input-output relationships the farmers need timely information on government agricultural programs and regulations. This would include information on price supports, acreage allotments, marketing quotas, and other regulations which might aid him in planning his most profitable production programs.

When to market. Marketing grain at the right time would probably mean more financially to Lenawee-Hillsdale farmers than any other grain marketing decisions they make. The real question in deciding when to market grains is whether the farmer can realize more from investment of his funds in grain and grain storage facilities than in an alternative use. It is not here intended to state definitely when each grain should be sold, but rather to point out the things which should be considered in arriving at this decision. There are two reasons for

not making specific recommendations. First it is a dynamic situation, changing daily. Second, marketing extension should be an educational process. The real value is not in making the decision today, but in helping each individual arrive at an understanding of his problem so that he can reach intelligent conclusions for himself.

The first half of the storage question concerns the possibility of price change. This is known as market outlook or analysis. It is an attempt to anticipate the future in order to guide present action.

O. V. Wells has stated the purpose of agricultural outlook to be as follows:

Our chief business in agricultural outlook and related work is to assist farmers and others to understand the economic relationship between supplies, prices, cost rates, probable changes in consumer demand, etc. The actual decisions are in the end made chiefly by individuals operating within our free enterprise framework. . . . The fact that each individual or set of individuals arrive at their own decisions allows us to do an efficient job of disseminating economic statistics and interpretations without swaying the whole body of decisions too far one way or another, at least as long as we remember that our job is chiefly an educational one.¹

There is a wealth of information available to a marketing agent to aid him in this duty. The difficulty is in sifting this information,

¹ O. V. Wells, Administrator, Agricultural Marketing Service, USDA, Purpose of Marketing Information, Market Information (A report of the National Marketing Workshop, Cornell University), August 26 to September 3, 1954, p. 38.

sorting out that which is applicable to his particular area, and then presenting it to the farmers of his area in a meaningful manner. It will require exceptional judgment on his part to present the right information at the best time.

The second part of the issue of when to sell involves the question of storage costs. Even this cannot be answered precisely because the cost must be calculated for each individual farm. The cost of storage can, however, be figured quite accurately if done on an individual basis. Again, the marketing agent should confine his efforts as much as possible to describing to farmers the kinds of costs involved and how to calculate them.

The cost of storing grain varies considerably between farms. We are interested only in the additional costs due to storage. Thus, a farmer who already has adequate storage bins or cribs will have a smaller additional storage cost than one who must first construct them. If the bins already exist, the cost of having the bins will continue even though they are not used. Therefore, their cost should be charged to the grain crop whether the grain is stored in them or not. An exception to this would be the case where they could be employed in alternative uses of equal value.

The fixed costs of farm storage structures are divided into four items, termed the annual use cost, by Thompson.¹ These are interest, depreciation, property taxes, and insurance. When bins must be constructed to accommodate grain storage, it is suggested that they be depreciated at a constant rate. This method is easy to understand and for our purposes sufficiently accurate. The average interest can be found by applying the interest rate to one-half of the original cost. Property tax varies with location both as to tax levy and assessment practice. Insurance can be figured on the average value of the bin.

There are also many variable costs involved in on-the-farm grain storage. These costs, unlike the fixed costs, occur only when the storage facilities are actually used, and vary with the amount of use. Among the variable costs which are relevant to farm grain storage are cleaning, spraying, and repairing bins, conditioning or treating the grain to prevent loss of quality, insurance on the grain, labor involved in putting the grain into bins and taking it out, possible insect and rodent damage, and shrinkage. Labor to put grain into and

¹ Layton S. Thompson, An Analysis of the Decision-Making Process of the Farm Firm as Related to the Construction of On-the-Farm Grain Storage Facilities, Mimeograph Circular 82, Montana State College, Agricultural Experiment Station, 1954, p. 69.

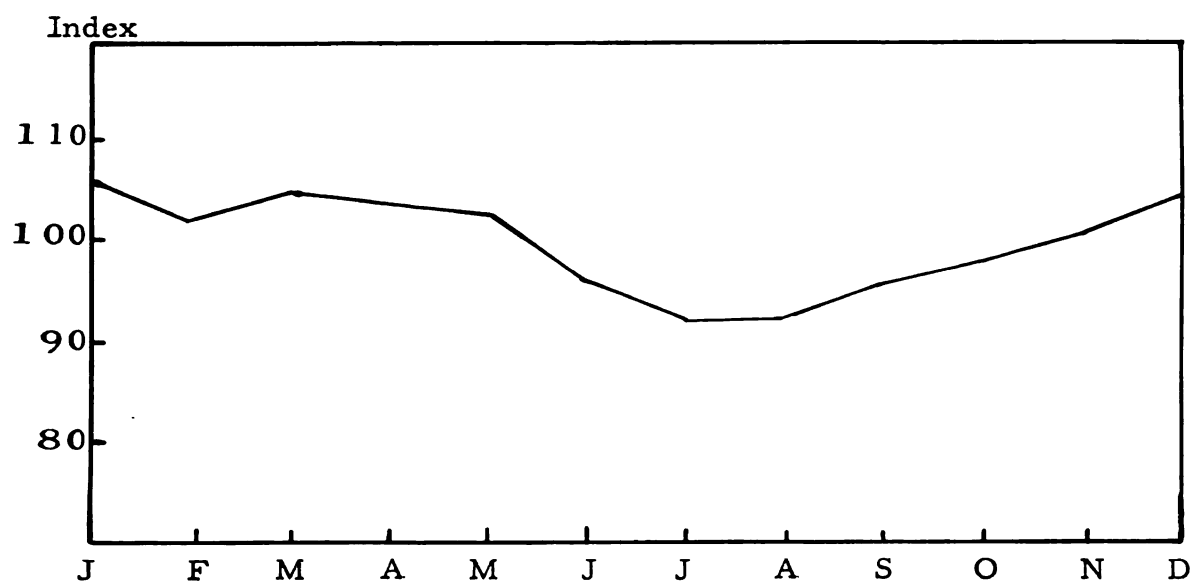
to take it out of a bin is not in all cases a legitimate charge. There are many times when this actually is labor saving rather than labor consuming, due to the long wait at an elevator to unload during the harvest season. Shrinkage is also a questionable charge. Often a higher grade and higher price come with the shrinkage, leaving a net position as good as or better than before the shrinkage occurred.

A farmer can also store his wheat at an elevator if he desires. This is undoubtedly the most practical means of storage in many cases. Each farmer must make the decision for himself. Once the cost of on-the-farm storage is calculated for a farm, it is easy to compare this with charges for commercial storage. There are many intangible benefits and costs of on-the-farm storage. Some farmers like to keep grain on the farm, rather than cash, as a reserve, and others use it as a method of overcoming uneven production to even out their income for income tax purposes. Some farmers like to plant and harvest grain but dislike the responsibility of checking on the condition of their stored grain and checking the markets to decide when to sell. Others like to dispose of their grain and depart for a winter vacation. Construction of farm storage facilities is a long-time decision involving expectations covering a considerable span of time. Many farmers, to avoid the uncertainty

and the initial cost of construction, are willing to give up the possibility of a somewhat higher return from their grain.

Commercial storage charges vary considerably in this area. The charges are in some cases figured on a monthly basis, sometimes as a flat charge regardless of length of storage time, and usually as a flat charge plus a monthly charge. The lowest charge for wheat storage in the district, according to the elevator survey, was a flat charge of four cents. The Uniform Grain Storage Agreement rates for CCC wheat are seven and one-half cents per bushel for receiving, insuring, conditioning, and storing for the first ten days. The charge after the first ten days is one-twentieth cent per day for two hundred and sixty days, and one-thirtieth cent per day for the rest of the first year. One elevator in the district charged the United Grain Storage Agreement rates. All others were lower.

The farmer who is considering the construction of on-the-farm grain storage facilities must first calculate his average annual storage costs. He can then compare the cost with the expected average annual price differential for the grain. The best guide in this is the historical average. Figure 8 shows graphically the average percentage price variation for Michigan wheat in the years 1947-1954. Table VII is the schedule of actual prices from which Figure 8 is derived. Similar data are available for all other important grain crops of this



Source: "Seasonal Price Variations of Major Michigan Farm Product," 1933-1942, and 1947-1954, Michigan State University, Agricultural Economics Department, mimeo.

Figure 8. Seasonal price variation of wheat in Michigan, 1947-1954.

TABLE VII

AVERAGE MICHIGAN WHEAT PRICES BY MONTHS, 1947-1954

Month	Price
July	1.95
August	1.94
September	2.03
October	2.06
November	2.12
December	2.21
January	2.21
February	2.11
March	2.15
April	2.14
May	2.11
June	1.96

Source: Unpublished data compiled by the Agricultural Economics Department, Michigan State University.

area. From Table VII it can be seen that on the average in the years 1947-1954 a farmer would have received twenty-seven cents per bushel more for his wheat if he had sold it in December rather than in August. This could be calculated for any two months. With the estimated average annual cost of storage and the estimated annual price differential a farmer would be in an excellent position to make his decision concerning construction of on-the-farm grain storage.

The farmer who already has sufficient storage space or who is considering the use of commercial storage has a different problem. He must first calculate his variable storage costs (fixed costs do not affect the decision). He should next obtain the best possible estimation of the price differential that will occur in the coming year. He can then avoid storage in those years in which he feels that it would likely prove unprofitable. The result should be a greater than average profit from grain storage.

Boger,¹ in his study which covered the years 1933-1942, found that the average seasonal price variation of wheat was small, but that in years of large crops the variation was approximately twice as large as in years of small crops. His conclusion was that it did

¹ L. L. Boger, Seasonal Price Changes of Major Michigan Farm Products, Michigan State College, Agricultural Experiment Station, Special Bulletin 355, January, 1949, pp. 13-14.

not normally pay to store wheat but that it was highly profitable following the harvest of a large crop.

There are several other things which should be considered when estimating the price differential which will occur in a coming year. Foremost among these is the effect of government actions. The Commodity Credit Corporation purchases have a large effect on wheat price seasonal differentials. Norton¹ noted this and stated that the CCC loans probably tend to retard the marketings over the United States after the immediate harvesttime sales are completed, and so cause a rapid rise in price after harvest. The general level of prices and the probability of its moving up or down is also an important consideration. If prices are rising, this will add to the probability that wheat prices will rise. If prices are in general on the downswing, there is very little probability of profit from storage. Futures prices of grains can be used as an indicator of the probable price movements. They represent the opinions of men in the grain business whose financial future will be decided by these price movements. Other things, such as changes in wheat stocks in the United States, possible variations in demand, changes in production of other

¹ L. J. Norton, When to Market Grain, University of Illinois, College of Agriculture, Circular 711, October, 1953, p. 23.

countries, and United States export subsidization policies should be given due study.

A consideration of wheat storage costs and the probable price changes demonstrates the calculations which may be made to answer the question of when to sell. For illustrative purposes, a farm having a one thousand bushel steel bin will be used.

The annual fixed cost can be calculated if the initial cost is known and the life of the bin is estimated. The list price of a thousand bushel steel bin was approximately \$375 at the time of this study. A nominal charge of twenty-five dollars is added to cover the cost of erecting the bin, making the total charge \$400.

Depreciating the bin at a constant rate over twenty-five years results in an annual depreciation of sixteen dollars. This is the usual method of figuring depreciation, and the amount used in this example. However, any farmer who constructs, alters, or enlarges a grain storage facility or adapts another structure for grain storage before December 31, 1956, may calculate depreciation, for income tax use, over a period as short as sixty months, regardless of the expected life of the structure.

Interest at 6 percent figured on the average value of the bin (one-half the original cost) is twelve dollars. Property tax and insurance vary with location. For illustrative purposes, property tax

is assumed to be five dollars and insurance is assumed to be three dollars.

A summary of these costs shows the annual use cost of the bin to be thirty-six dollars, or three and six-tenths cents per bushel.

TABLE VIII

ANNUAL USE COST OF A 1,000 BUSHEL STEEL GRAIN BIN

Item	Cost
Depreciation (4 percent per year)	\$16.00
Interest (6 percent of average value)	12.00
Property tax	5.00
Insurance	3.00
Total	\$36.00
Total cost per bushel capacity	0.036

The variable costs are flexible and difficult to determine.

Bin repair and maintenance are estimated at one-half cent per bushel. Cleaning and spraying the bin for grain quality maintenance is also estimated at one-half cent per bushel. No allowance is made for rodent or insect damage, in view of the grain treatment and the rodent-proof bin. Interest on two dollar per bushel wheat at 6

percent is one cent per bushel per month. Shrinkage is figured at 1 percent. On two dollar wheat this amounts to two cents.

Loss of quality is a possible cost of grain storage. Charges have been made for adequate storage facilities and quality maintenance precautions. If only that grain which is fit for storage is held on the farm there should be little or no loss from spoilage. No charge is allowed for this but it must be recognized that inadequate storage facilities or care can result in large losses.

A summary of wheat storage charges under these assumptions is given in Table IX.

Those farms which already have storage bins should not figure the fixed cost because this will go on even though the bin is not used. In this case the storage cost would be nine cents. Labor for putting the grain into and removing it from the bins should be charged only if the farmer believes that this is a greater cost to him than the usual wait at the elevator for unloading during the harvest season.

Commercial storage costs vary with location. The Uniform Grain Storage Agreement rates result in a charge of thirteen cents for one hundred twenty days (four months). This indicates that farm storage costs slightly less than commercial storage from a strictly money cost viewpoint unless commercial storage is available at less than UGSA rates.

TABLE IX
COST OF ON-THE-FARM WHEAT STORAGE,
AUGUST TO DECEMBER

Item	Cents per Bushel
Fixed cost	3.6
Bin repair and maintenance	0.5
Quality maintenance (cleaning and spraying bins)	0.5
Interest on wheat	4.0
Insurance on wheat	1.0
Extra labor	1.0
Shrinkage	2.0
Total	12.6

The average price increase from August to December in recent years has been 27 cents. Thus, on the average, a farmer should have realized 14.4 cents per bushel from on-the-farm grain storage.

Where to market. The question of where to market is essentially one of where the producer can obtain the highest net returns. This may or may not be the same as the place offering the highest price.

The marketing agent, of course, could not tell farmers where to sell and still obtain the cooperation of the grain merchants of the district. Furthermore, it is not his responsibility, or privilege, to make specific decisions, but rather to make available to farmers information on which they can base intelligent decisions. The problem is one of assuring that they have complete and accurate information. Only experience can show what information is needed.

The most important need in deciding where to sell is knowledge of the location of the various markets and the services and facilities provided at each of them. Many of the farmers interviewed in the farm survey gave evidence of some familiarity with their marketing alternatives. It is questionable, though, whether they are basing decisions on accurate information. This conclusion was reached because of their conflicting reasons for selling or not selling at certain markets.

Another area in which there appeared to be some confusion was the availability of commercial storage. Farmers need to know where they can store their grain and what the handling and storage charges are. The elevator survey showed that these charges vary considerably among elevators.

The most obvious area of information needed is the net price which would be obtained at the various markets. Farmers need to know the comparative prices for the same kinds and grades of grain at each market. They also must make allowance for the differences in handling and transportation costs.

The issues involved in the decision of where to sell can be illustrated by considering two farmers, one in Lenawee County and the other in Hillsdale County.

The first farm is located in Lenawee County, six miles east and one mile north of Adrian. This farmer would have many alternative markets available. The farm is nearly equidistant from elevators in Adrian, Tecumseh, Britton, Deerfield, and Blissfield. None of these elevators has a locational advantage. The farmer should choose between the elevators on the basis of price paid, grain handling facilities at each of the elevators, and the transportation cost. There are adequate, hard-surfaced roads to each city or village involved, so the transportation is, for all practical purposes, equal. Assuming that

each elevator offers the same net price (same grade, weight, and dockage), the farmer will then make his decision on the basis of personal preference and the facilities of each elevator. The unloading facilities are especially important during the harvest season. The shortest wait may become an important consideration.

If the farmer is interested in storage facilities he will be partially limited in choice of elevator. The elevator at Tecumseh and one of the Adrian elevators do not offer storage service to farmers. One of the elevators at Adrian and those in Blissfield and Deerfield do store grain for farmers. Other things being equal, the issue of where to store the grain rests on the comparative storage charges. These are:

	Handling (per bu.)	Storage (per bu.)
Adrian Grain Company	7.5 cents	1/20 cent first 240 days, 1/30 cent balance of one year
Blissfield Cooperative	5 cents	1.5 cents per month
Deerfield Cooperative	5 cents	1.5 cents per month

From this information it can be seen that the charge is two and one-half cents more at the Adrian Grain Company for wheat stored up to eight months. The difference is reduced thereafter.

There is one further consideration for this farmer. A large amount of grain goes to elevators outside the district, especially to the Anderson Truck Terminal at Maumee, Ohio. The farmer should consider the same things for this elevator as for the local elevators and in addition must take into account the larger transportation costs. If he would have hired his grain trucked to any one of the local elevators it would have cost him about three cents per bushel. The cost to truck it to Maumee, Ohio, would be about five cents. This means that he would have to receive two cents more per bushel for his grain at Maumee to have the same net price. Furthermore, the farmer might be able to utilize otherwise unused labor to deliver the grain to a local elevator with tractor and wagon, but have to hire a truck to take it to the more distant elevator, increasing the difference in hauling cost. The storage charge at this elevator is one and one-half cents per month with a maximum of twelve cents per year. Thus, if the grain is stored there is an advantage of at least five cents per bushel at the Maumee, Ohio, elevator.

A farmer whose farm is about five miles west of Hillsdale has a large number of markets available to him. The closest elevators are located at Hillsdale, Allen, and Reading. Others within a few miles are located at Litchfield, Jonesville, and Montgomery. This farmer has fewer alternatives for commercial storage in the

area than does the Lenawee farmer. Of the nine elevators within ten miles of his farm, only one offers storage for farmers' grain. The charge at this elevator, which is located in Montgomery, is two cents per bushel per month. If storage is desired, the farmer is limited in his choice to this elevator or a more distant one outside the area. The trucking charge to Montgomery would be approximately three cents per bushel. It is estimated that this charge would be seven cents per bushel to Maumee, Ohio. Therefore, it would be necessary to receive at least four cents more per bushel for wheat at Maumee than at Montgomery. The storage charge at Maumee is one-half cent per month less than at Montgomery, so, depending upon the number of months of storage, the price differential necessary would become less.

How to market most effectively. There are several possible alternatives which may result in more effective grain marketing. Farmers sometimes sell their grain in the field, avoiding harvesting risk, effort, and expense. This could be especially practical for those who lack grain harvesting and handling equipment. Contracting for the sale of a grain crop before it is harvested or even planted could be practiced in some cases. It would be equivalent to price insurance and would require price forecasting in a manner similar

to that required for the storage decision. An issue which should be decided by those selling a crop as grain is whether they should clean it. The decision will depend upon the price increase which might result and the cost to the farmer of cleaning the grain.

A large share of the grain produced in this district is marketed through livestock. Whether he should sell grain or livestock is a question every farmer who is or could become equipped to handle livestock must decide. It was not the purpose of this study to determine the relative profitability of livestock production as opposed to the sale of grain. Nevertheless, it is an important phase of the grain marketing problem which will confront the grain marketing agent. The answer to this question will involve the input-output relationships of livestock production and price outlook for both grain and livestock.

Summary

The marketing agents' activities can be summed up in the statement that he must gather, evaluate, and disseminate information. This information can be classified as what to produce, when to sell, where to sell, and how to market the product most effectively.

The first step in marketing is the determination of what to produce. Once a farmer has made this decision he commits resources to specific production for the period of the production cycle. There

are three kinds of information the marketing agent can make available to farmers to help them in this decision. The first of these is the market price outlook. This will enable them to arrive at an estimation of the value of the product of each alternative. The second kind of information needed is data on physical input-output relationships of various alternatives. This is needed to determine the cost of production of each alternative. In addition to market outlook and physical input-output data the farmers need timely information on government agricultural programs.

The question of when to market is one of deciding whether price will rise enough from harvesttime to time of selling to cover the cost of storage. There is a wealth of information available to assist a marketing agent in providing outlook information. The difficulty is in sifting this information, sorting out that which is applicable to his particular area, and then presenting it to the farmers in a meaningful manner. Storage costs must be calculated individually for each farm. The first question is whether storage bins would have to be constructed. If the bins already exist they should not be considered as a cost in the storage decision because the cost will be there whether grain is stored or not. Fixed costs involved are interest on the investment, depreciation, property taxes, and insurance on the storage bins. Variable costs are cleaning, spraying, and

repairing bins, conditioning or treating grain to prevent loss of quality, insurance on the grain, and possible insect and rodent damage. Shrinkage and the labor involved in putting grain into bins and taking it out may be cost increasing, but are not necessarily so. There are also intangible considerations in the grain storage decision. Once the cost of on-the-farm storage is calculated for a farm this can be compared with the cost of commercial storage.

The issue of where to market should be decided on the basis of highest net returns. This may or may not be the same as the place offering the highest price. In making this decision farmers need information on the location of alternative markets, the facilities available at these markets, handling and storage charges, hauling costs, and comparative prices.

There are several possible alternatives which may result in more effective grain marketing. Some of these are to sell the grain in the field, to contract for sale before production, cleaning the grain before selling, and marketing the grain through livestock. Each of these alternatives will have to be judged in the light of the individual farmer's personal situation.

The marketing problem of what to produce and when, where, and how to market it comprises the heart of the grain marketing

agent's duty to his district. His responsibility is not one of solving the problem for the farmers of his district, but rather one of making the necessary information available to them and showing them how to use that information in solving their problems for themselves.

CHAPTER V

SUMMARY AND CONCLUSIONS

The district marketing agent is one of the newest programs of the Michigan Cooperative Extension Service. The question of the utility of this service quite naturally arises as it would with any new program. What is there that should be done which isn't already being done and what could a district marketing agent do about it? This thesis sought to provide answers to some of the questions by specifically considering the grain marketing portion of the job of the livestock and grain marketing agent of the Lenawee-Hillsdale district.

This marketing district is located in southeastern Michigan in one of the most productive agricultural areas of the state. Field crops accounted for 26 percent of the income from farm products in this district in 1949. Field crops were exceeded only by livestock and dairy products in this respect. The population of the district was about evenly divided between urban, rural, and rural nonfarm.

Wheat was the most important cash grain crop in this district. Lenawee County ranked second and Hillsdale County ranked seventeenth among the Michigan counties in wheat production in 1953. Wheat acreage and production have varied greatly, but the recent

and long-time trends are toward increasing acreage and production. Government acreage controls govern wheat acreage at present so the production trend has little validity.

Corn was the most important crop of the area on the basis of production, and was exceeded only by wheat in value of sales. Corn was produced primarily as a feed crop. The recent acreage trend was toward moderately increasing acreage, and production was increasing rapidly.

Oats were decreasing in both acreage and total production. This is a comparatively low-value crop which is raised for feed and because of its adaptation to crop rotations of this district. Soybeans had a recent decreasing acreage, but increasing production trend. Soybean production was exceptionally variable. Barley and rye were relatively unimportant crops in this district. Their long-time trend has been toward decreasing acreage and production. They made large increases in acreage in 1954, but this can be attributed to acreage restrictions on wheat.

It seems safe to predict that the acreages of most of the grain crops would be altered by government acreage restrictions on only one or two crops. A decrease in wheat acreage, for instance, may be reflected in increases in soybeans, barley, and rye.

There were many grain marketing facilities available to the farmers of this district. There were twenty-seven elevators and flour and feed mills located within the district. These ranged in size from the very small elevators which purchased only enough grain to furnish farmers who wished to buy, to a large flour mill which handled more wheat than the entire production of Lenawee and Hillsdale counties in 1954. It would appear that there were sufficient grain marketing facilities within this district. However, this was evidently not the case for a substantial amount of grain did move outside the district to the first buyer.

Each farmer interviewed in the farm survey was asked why he chose the place he did to sell his grain. The reason most often given by those selling to local elevators was convenience with higher net price received being of practically equal importance. Those selling to the elevators outside the district gave the higher price received for their grain as their main reason.

The elevators within and without the district are the primary grain buyers. However, there are three flour and feed mills in the district and a few farmers reported in the farm survey that they sold grain to other farmers for feed and seed.

The grain marketing agent will be concerned with the gathering and dissemination of market information. Therefore, the kinds

and sources of marketing information which were available and used by farmers were given. This material was gathered as a part of the farm survey. It was found that the farmers consider the radio their most valuable medium for obtaining marketing information. This was followed in importance by newspapers, individuals, magazines, television, and special market reports.

Radio station WJR, of Detroit, was the most listened to station, with station WABJ, of Adrian, also popular. Two daily newspapers were widely read. The Adrian Daily Telegram was most used in Lenawee County and the Hillsdale News was most often read in Hillsdale County. Together, they gave nearly complete farm coverage in this district. There were several very popular farm magazines in this district. This was practically the only source of outlook information for these farmers. Elevator managers were the most often mentioned individuals from whom farmers received grain marketing advice. Television and special market reports were of negligible importance as sources of marketing information to farmers of this district.

The efforts of the grain marketing agent will be directed toward solving the grain marketing problem. The four parts of this problem are what grain to produce, when to market it, where to market it, and how to market it most effectively. There are three

categories of information farmers need to help them determine what grain to produce. These are the market price outlook, physical input-output relationships of the various alternatives, and timely information on government agricultural programs.

The issue of when to market is really a question of whether price will rise enough to cover the cost of storage. The marketing agent should present in understandable form the price outlook for the grains in his particular area. The second part of this question involves storage costs. These costs are different for each farm. Since the marketing agent cannot calculate this cost for every farm, he must confine his efforts as much as possible to describing to farmers the kinds of costs involved and how to calculate them.

Where to market grain is an issue which will require exceptional diplomacy on the part of the marketing agent. He cannot, of course, specifically tell any farmer where to sell his grain. He must be careful that his remarks cannot even be construed as suggesting sale at a specific place. The cooperation of the elevator managers is essential to success, and should be cultivated even at the expense of appearing to sanction inefficient operators for a time. If he first obtains their confidence he will surely reap additional reward in the long run. He should confine himself, in advising farmers, to giving locations of buyers, the services and facilities at each

of them, the availability of commercial storage and the handling and storage charges. He should, at first, refrain from discussion of comparative prices at specific elevators but after becoming thoroughly familiar with the situation he may feel that dissemination of this information is also necessary.

There are various alternatives which may result in more effective grain marketing by some farmers. These include contract selling of a crop, selling in the field, cleaning grain before selling, and marketing grain through livestock.

This study was entered into as an attempt to assist district marketing agents through consideration of one phase of the job of one of the pioneers in this position. It has shown the importance of the grain crops of the area, their production, and production trends. It has described the grain marketing facilities of the district and the surrounding area. It has given at least an indication of the marketing information farmers have available, use, and want. Lastly, it has considered the grain marketing problem as it concerns the marketing agent. It is sincerely hoped that it will be of some value in its intended use. Only experience, the great teacher, will divulge the answers to many of the problems to which this agent must find solutions.

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APPENDIXES

APPENDIX I

MICHIGAN STATE COLLEGE
Department of Agricultural Economics
East Lansing
Michigan

C O N F I D E N T I A L

Carleton C. Dennis
Research Assistant

1. ABOUT HOW MUCH OF EACH OF THESE GRAINS DID YOU HANDLE LAST YEAR?

<u>CORN</u> bu.	<u>BARLEY</u> bu.
<u>WHEAT</u> bu.	<u>RYE</u> bu.
<u>OATS</u> bu.	<u>SOYBEANS</u> bu.

2. ABOUT WHAT PERCENT OF EACH GRAIN DID YOU PURCHASE AT THE TIME OF DELIVERY TO YOUR PLACE OF BUSINESS?

<u>CORN</u> %	<u>BARLEY</u> %
<u>WHEAT</u> %	<u>RYE</u> %
<u>OATS</u> %	<u>SOYBEANS</u> %

3. DO YOU STORE GRAIN FOR FARMERS? Yes _____ No _____ (Check ☒ One)

IF SO, ABOUT WHAT PERCENT OF EACH GRAIN HANDLED BY YOU WAS PLACED IN STORAGE FOR A MONTH OR MORE BEFORE ACTUAL SALE BY THE FARMER?

<u>CORN</u> %	<u>BARLEY</u> %
<u>WHEAT</u> %	<u>RYE</u> %
<u>OATS</u> %	<u>SOYBEANS</u> %

4. WHAT ARE YOUR CHARGES FOR GRAIN HANDLING AND STORAGE?

Commodity	Handling	Storage	Other (Specify)
CORN			
WHEAT			
OATS			
BARLEY			
RYE			
SOYBEANS			

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2. The second part of the document is a list of the names of the members of the committee who have been appointed to study the problem of the

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MICHIGAN STATE COLLEGE

C O N F I D E N T I A L

Page - 2 -

Carleton C. Dennis
Research Assistant

5. ABOUT WHAT PERCENT OF THE ANNUAL QUANTITY OF WHEAT HANDLED BY YOU IS DELIVERED TO YOUR PLACE OF BUSINESS EACH MONTH?

<u>JANUARY</u>	<u>%</u>	<u>MAY</u>	<u>%</u>	<u>SEPTEMBER</u>	<u>%</u>
<u>FEBRUARY</u>	<u>%</u>	<u>JUNE</u>	<u>%</u>	<u>OCTOBER</u>	<u>%</u>
<u>MARCH</u>	<u>%</u>	<u>JULY</u>	<u>%</u>	<u>NOVEMBER</u>	<u>%</u>
<u>APRIL</u>	<u>%</u>	<u>AUGUST</u>	<u>%</u>	<u>DECEMBER</u>	<u>%</u>

6. DO YOU BELIEVE THAT FARM STORAGE OF GRAIN IN YOUR AREA IS: (Check ☒ One)

INCREASING _____

DECREASING _____

REMAINING ABOUT THE SAME _____

7. IS YOUR PLACE OF BUSINESS: (Check ☒ One)

A FARMER COOPERATIVE _____

A LINE ELEVATOR _____

INDEPENDENT ELEVATOR _____

OTHER (Please Explain) _____

8. ARE YOU AFFILIATED WITH ANY OTHER ELEVATOR OR GROUPS OF ELEVATORS? (Check ☒ One)

YES _____ NO _____

IF SO, WITH WHOM? _____

Signature_____
Elevator_____
Address

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APPENDIX II

LENAWEE-HILLSDALE MARKETING QUESTIONNAIRE 1955

Name _____ Address _____

1. A. To what newspapers do you subscribe? (Mark with A)
- B. Which of these are a source of market quotations or other market information to you? (Mark with B)

Daily papers

1. Adrian Daily Telegram
2. Hillsdale News
3. Toledo Blade
4. Detroit Free Press
5. Detroit Times
6. Chicago Daily Drivers Journal
7. Jackson Citizen Patriot

Weekly papers

1. Litchfield Gazette
2. North Adams Advocate
3. Reading Farmers Advance
4. Reading Hustler
5. Addison Courier
6. Blissfield Advance
7. Clinton Local
8. Hudson Post Gazette
9. Morenci Observer
10. Tecumseh Herald

2. A. What farm magazines do you receive? (Mark with A)
- B. Which of these are a source of marketing information to you? (Mark with B)

- | | | |
|--------------------|----------------------------|---------------------------|
| 1. Michigan Farmer | 4. Michigan Farm Economics | 7. Prairie Farmer |
| 2. Cappers Farmer | 5. Hoards Dairymen | 8. Better Farming |
| 3. Farm Journal | 6. Successful Farming | 9. Indiana Farmer's Guide |

Table 1. *Salmonella* serotypes and their associated diseases

3. A. What radio programs do you find of value in securing Livestock Marketing Information? Mark A.

B. What radio programs do you find of value in securing Grain Marketing Information? Mark B.

- | | |
|-------------------------|----------------------------|
| 1. WJR Detroit _____ | 8. WOWO Fort Wayne _____ |
| 2. WTVB Coldwater _____ | 9. WKAR East Lansing _____ |
| 3. WJOE Hillsdale _____ | 10. WMAQ Chicago _____ |
| 4. WABJ Adrian _____ | 11. WLS Chicago _____ |
| 5. WIBH Jackson _____ | 12. WKZO Kalamazoo _____ |
| 6. WPAG Ann Arbor _____ | 13. WSPD Toledo _____ |
| 7. WWJ Detroit _____ | 14. WTOD Toledo _____ |

4. A. Do you receive market reports on television? YES ___ NO ___.

Station _____ Program _____ Time _____

B. Do you have a television set? YES ___ NO ___

5. Do you look to other sources of information regarding when to sell?

(L1, 2,3,-Livestock; G1,2,3, - Grains)

Individuals

Special Market Reports

- | | |
|------------------------------|---|
| 1. Neighbors _____ | 1. U.S.D.A. Market Reports _____ |
| 2. Truckers _____ | 2. Mich. Crop & Livestock Reporting Service _____ |
| 3. Elevator managers _____ | 3. Private News Service _____ |
| 4. County Agr'l Agents _____ | 4. Other _____ |
| 5. Livestock buyers _____ | |
| 6. Commission men _____ | |
| 7. Others _____ | |

-3-

6. Of all the sources of marketing information available to you, what are the three most important ones in order of preference. (Indicate, 1,2,3,)

- | | |
|---------------------|--------------------------------|
| 1. Newspapers _____ | 4. Television _____ |
| 2. Magazines _____ | 5. Individual _____ |
| 3. Radio _____ | 6. Special Market Report _____ |

7. How many head of livestock did you market in 1954?

- | | |
|-----------------------|------------------------|
| 1. Beef Cattle _____ | 4. Swine _____ |
| 2. Dairy cattle _____ | 5. Sheep & Lambs _____ |
| 3. Calves _____ | 6. Feeders _____ |

8. A. Where do you market your wool? _____

B. Why did you select this market? _____

9. Where did you sell your livestock in 1954?

Market	Name and Location	Key
1. Beef cattle _____	_____	T-Terminal
2. Dairy cattle _____	_____	A-Auction
3. Calves _____	_____	OB-Order Buyer
4. Hogs _____	_____	D-Dealer
5. Sheep & Lambs _____	_____	Tr-Trucker
6. Feeders _____	_____	P-Packer
7. Others _____	_____	B-Butcher
		L-Lockerplant
		Cy-Concentration Yard
		F-Farmer
		O-Other

10. Why did you select the above markets? Indicate first choice by letter for each livestock class.

Livestock

Key

- | | | |
|-----------------------|--------------------------------|---------------------------------|
| 1. Beef cattle _____ | A. Higher price | F. Less Trans. cost |
| 2. Dairy cattle _____ | B. Convenience | G. Confidence in buyer |
| 3. Calves _____ | C. Less shrink | H. Confidence in selling agency |
| 4. Hogs _____ | D. Habit (custom) | I. Don't know |
| 5. Sheep & Lambs | E. Price known before selling. | J. Other |
| 6. Feeders | | |
| 7. Others | | |

11. What other markets are available to you? (See 10)

1	<u>Class of livestock</u>	<u>Type of market</u>	<u>Name or location</u>
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

12. Why haven't you sold at these markets? Indicate first choice by number for each livestock class.

1. Price too low _____
2. Too few buyers at market _____
3. Transportation costs too great _____
4. Owns & sells small lots _____
5. Don't know _____
6. Other _____

13. Do you truck your own livestock? YES ____, NO ____.

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-5-

14. How do you determine when to sell your livestock? (Rank 1,2,3, in order of importance.)

1. Check daily price quotations _____
2. Use outlook information _____
3. Use seasonal price information _____
4. Sell when livestock is ready _____
5. When market agency say they are ready _____
6. Other _____

15. A. Did you purchase feeder cattle in 1954? YES ____ NO ____
- B. Did you purchase feeder pigs in 1954? YES ____ NO ____
- C. Did you purchase feeder lambs in 1954? YES ____ NO ____

16. From what source do you secure your feeders?

	Commission Firm	Auction	Direct from range	Other
1. Cattle				
2. Pigs				
3. Lambs				

17. Why do you purchase feeders where you do?

1. Convenient _____
2. Lower cost _____
3. Better quality _____
4. More uniform grade _____
5. Freedom from disease _____
6. Faith in seller _____
7. Other _____

18. 1. How many bushels of grain did you produce in 1954?

- | | |
|--------------------|-----------------------|
| 1. Corn _____ bu. | 4. Barley _____ bu. |
| 2. Oats _____ bu. | 5. Rye _____ bu. |
| 3. Wheat _____ bu. | 6. Soybeans _____ bu. |

-6-

19. How much of this has been sold or will be sold as cash grain?

- | | |
|--------------------|-----------------------|
| 1. Corn _____ bu. | 4. Barley _____ bu. |
| 2. Oats _____ bu. | 5. Rye _____ bu. |
| 3. Wheat _____ bu. | 6. Soybeans _____ bu. |

20. Do you store grain on your farm other than the amount you may need for livestock? YES ____, NO ____.

21. About how many bushels in excess of your normal livestock needs could you store in your present facilities?

- | | |
|---------------------------|-------------------|
| 1. Small grains _____ bu. | 2. Corn _____ bu. |
|---------------------------|-------------------|

22. Where did you sell your grain in 1954?

<u>Market</u>	<u>Name of elevator, terminal, etc.</u>	<u>Key</u>
1. Corn _____	_____	
2. Oats _____	_____	F-Farmer
3. Wheat _____	_____	T-Terminal
4. Barley _____	_____	L-Local Elevator
5. Rye _____	_____	G-Government
6. Soybeans _____	_____	M-Miller

23. Is there a special reason for selling at the above place or places?

- | | | |
|-------------------|-------------------|---------------------|
| 1. Corn _____ | Key | |
| 2. Oats _____ | A. Convenience | E. No reason |
| 3. Wheat _____ | B. Higher price | F. Don't know |
| 4. Barley _____ | C. Less dockage | G. Other (write in) |
| 5. Rye _____ | D. Custom (habit) | |
| 6. Soybeans _____ | | |

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24. (Answer only if the answer to No. 22 is other than at the local elevator) Is there a special reason for not selling at a local elevator?

1. Have to wait too long _____ 4. Elevator won't buy (explain) _____
 2. Price too low _____ 5. No reason _____
 3. Too much dockage _____ 6. Other _____

Questions 25 through 28 apply only to those selling grain at a local elevator.

25. How would you rate the service that the elevators of your area give when buying grain, especially during the harvest season? .

1. Good _____ 2. Fair _____ 3. Poor _____

26. How long do you have to wait to unload wheat at the elevator _____ hrs.

27. Do you feel that this wait is too long? YES _____ NO _____.

28. Do you feel that the local elevator prices paid for grain are in line with the other grain buyers in the area? YES _____ NO _____.

29. Do the elevators in your community ever close because of lack of storage space? YES _____ NO _____.

30. Do you feel that the grain handling and storage charges at the elevators of your area are reasonable? YES _____ NO _____.

31. How much have you increased your farm storage facilities during the last five years? Corn _____ bu., Small grains _____ bu.

32. In your opinion, what change in marketing of grain & livestock would help farmers increase their income.

Grain _____

Livestock _____

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