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The local grain elevator business in Louisiana: a study of characteristics and problems

Harlon D. Traylor

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THE LOCAL GRAIN ELEVATOR BUSINESS IN LOUISIANA
A STUDY OF CHARACTERISTICS AND PROBLEMS

Harlon D. Traylor
and
Bernis E. Williamson

DEPARTMENT OF AGRICULTURAL ECONOMICS
AND AGribUSINESS

LOUISIANA STATE UNIVERSITY AND
AGRICULTURAL AND MECHANICAL COLLEGE
AGRICULTURAL EXPERIMENT STATION
CHARLES W. UPP, DIRECTOR
IN COOPERATION WITH
THE SMALL BUSINESS ADMINISTRATION
WASHINGTON, D.C.
Foreword

This study of the local grain elevator business in Louisiana is one of five agribusiness studies contributing to a project under the general title, "An Economic Analysis of Problems Affecting the Success of Selected Small Agricultural Businesses in Louisiana." The other four phases are concerned with:

1. Feed, seed, and fertilizer supply stores.
2. Retail farm equipment.
3. Feed mills.
4. Local agricultural canning, packing, and processing plants.

These agribusinesses have problems peculiar to their close relationship to agriculture and, although they perform a very important service to farmers and the community, they have been relatively neglected in terms of economic research.

These studies are intended to provide a first look at these important agriculturally oriented small businesses in the state and to specifically recognize the incidence, magnitude, and nature of problems which confront them.

This research project was conducted by the Department of Agricultural Economics and Agribusiness, Louisiana Agricultural Experiment Station, Louisiana State University, and financed in part by the Small Business Administration, Washington, D.C.

Professional personnel engaged in the project include:

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The Local Grain Elevator Business
In Louisiana

A Study of Characteristics and Problems

Prepared by the Department of Agricultural Economics and Agribusiness, The Louisiana Agricultural Experiment Station, LOUISIANA STATE UNIVERSITY, under the Small Business Administration Management Research Grant Program

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OCTOBER 1963
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The Local Grain Elevator Business
In Louisiana
A Study of Characteristics and Problems

By Harlon D. Traylor and B. E. Williamson

Introduction

Local grain elevators, a relatively new development in Louisiana agriculture, are now an integral part of the economic structure of many communities in the state. Nearly $10 million of grain was purchased from farmers by the 29 local grain elevators in the state in 1960 (Figure 1). Of the 29, 24 had been established since 1954 and 7 since 1958. With few exceptions such firms are small independent businesses.

The fast rate of growth in the industry indicates that very few problems have become acute to local grain elevator operations in Louisiana. Moreover, to the knowledge of the writers, there had been no cases of bankruptcy in this type of business in the state as of 1960. Many problems do exist in the industry, however, and they are expected to become more acute as competition for available grain becomes keener.

There have been a number of studies of local grain elevator operations in the older grain producing areas of the nation. A selected bibliography of reports on such studies follows the Appendix of this report. These studies are useful in providing information on basic patterns of local grain elevator operations. In appraising this industry in Louisiana and other parts of the South, substantial deviations from the basic pattern exist due to regional differences. Important among such deviations are differences in the season of operations. Very little published material exists on local grain elevator operations in the South.

Since 1960 it has been reported that seven new local grain elevators have been constructed or are in the process of construction in the state. They are not included in this analysis. It should also be noted that certain oil mills, feed mills, and other operations are at times substantial buyers of farmers' grain and are somewhat competitive with local grain elevators. Their pattern of operation is, however, quite dif-

1Associate Professor and former Assistant Professor, respectively, Department of Agricultural Economics and Agribusiness, Louisiana State University, Baton Rouge, Louisiana.

2The names and addresses of the 29 firms appear in Appendix A.
ferent from that of local grain elevators and they were also omitted in the present analysis.³

**Purpose of Study**

This report is presented for consideration and study by all individuals concerned with identifying and solving problems associated with the operation of local grain elevators. Emphasis is on grain elevator operations. However, farmers, manufacturers, merchants, bankers, government officials, and others interested in the economic development of an area will find the report useful.

Specifically the report has the objectives of (1) determining selected characteristics of local grain elevators in Louisiana and 2) identifying and, where possible, suggesting solutions to problems in the industry.

³While feed and oil mills were omitted from the survey, a few elevators operated under a parent company name such as feed and oil mills. When merchandising grain rather than processing it, was the primary activity of the facility involved, the operation was included in the survey of local grain elevators.
Method of Study

A list of local grain elevators in Louisiana was developed through an examination of telephone directories and through contact with various professional agricultural workers. A short mail questionnaire was then sent to each firm on this list to determine the real nature of the business with the expectation that an efficient sample of firms to study could be drawn. A copy of the mail questionnaire appears in Appendix B.

Thirteen local grain elevators and several other handlers of farmers’ grain, such as oil mills, feed mills, terminal elevators, rice driers, rice mills, and operators specializing in storage of government-owned grain responded. A more complete list of local grain elevators in Louisiana was determined by consulting three local grain elevator operators who were among the leaders in the industry.

These three operators also were interviewed in depth about their operations, other local grain elevator operations in Louisiana, and the problems of such operations. A more detailed questionnaire was then prepared to obtain information from other elevator operators by personal interview. This questionnaire, or interview schedule, appears in Appendix C. In all, the operations of 15 of the 29 local grain elevators were studied. This included the 3 case studies and 12 survey interviews. In addition, two officers of the Mid-South Grain Shippers’ Association were interviewed concerning problems in the industry.

Selected Characteristics

Basically, local grain elevator operators consolidate small lots of grain from farmers into large truckload or carload lots. In this process of assembling, operators often buy, sell, dry, clean, blend, store, transport, and otherwise condition grain for sale to terminal grain merchants, oil millers, feed millers, and others. The sections which follow describe this operation in more detail and make certain comparisons with local elevator operations in the North Central region of the United States.

Ownership and Management

Legal ownership of the 12 survey elevators consisted of 6 corporations, 5 partnerships, and 1 individual proprietorship. Capital requirements probably caused a tendency toward multiple ownership. None of the firms planned to change the type of ownership under which they were operating at the time of the survey.

All the firms owned their plants and all except three firms owned the land upon which the elevator was located. These three leased railroad property which was not for sale. Railroads did not require grain to be shipped by rail as a condition of the lease. In fact one firm, which
leased land for the elevator location from a railroad, shipped almost entirely by truck. No problems were reported by the elevators concerning the length and other terms of such leases. Desirable location of the leased property was among the reasons for leasing.

In 8 of the 12 firms the managers were also either part owners or part of the owners’ families. In these cases management ran the business with a relatively “free hand.” Of the other four cases, managers of three were also allowed to run the business with a relatively “free hand.” One of the managers was in charge of the “mechanics” of running the elevator, but made no decision as to pricing or to whom to sell. Since management was so closely related to ownership, incentives for management, such as profit sharing, were not offered.

Nine of the firms were single unit operations; i.e., they operated elevators in only one place. Two of the firms operated two elevators each and the remaining firm was part of a national agricultural corporation with diversified interests. The owners seemed to integrate vertically rather than horizontally; i.e., they owned various local agriculturally related businesses instead of owning several elevators. It should be noted, however, that a looser form of horizontal integration existed in a few cases through financial arrangements and interlocking ownership interests.

Labor

Operators of all 12 survey firms indicated that labor posed no particular immediate problems for them. Only one manager stated that obtaining, training, and keeping labor was a problem and another expressed difficulty in retaining competent office help.

Labor requirements, by season, for the 12 firms surveyed are shown in Table 1. Some firms used six or seven seasonal employees while others used none. Those firms not requiring seasonal labor were able to utilize labor, when not needed for the elevator operation, in other types of business which they conducted.

Two firms offered hospitalization insurance, the only formal fringe benefit discovered in the survey. Available labor, both in terms of

<table>
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<th>TABLE 1.—Seasonal Labor Requirements Reported by 12 Local Grain Elevators, Louisiana, 1960</th>
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<tbody>
<tr>
<td>Number of employees</td>
</tr>
<tr>
<td>Per firm</td>
</tr>
<tr>
<td>March-May</td>
</tr>
<tr>
<td>June-August</td>
</tr>
<tr>
<td>September-November</td>
</tr>
<tr>
<td>December-February</td>
</tr>
<tr>
<td>Most usual range</td>
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<td></td>
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<tr>
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<td></td>
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</tbody>
</table>

8
number and quality, and even on a seasonal basis, was reported as adequate.

Capital Requirements

If the 12 firms are typical of the industry, more than $4 million had been invested in the 29 firms in Louisiana as of 1960. The average capital invested in fixed facilities was about $146,000 for the 12 firms surveyed, ranging from $20,000 to $350,000. The capital required for peak inventory was an average of $106,500 with a range of from $35,000 to $400,000.

The following question was asked: "Would you add additional equipment or make improvements in your facility if more favorable credit could be obtained?" Two managers answered yes to this question. Although few would change any part of their plant if they could obtain more favorable financing, they generally felt that available credit terms were too stringent. Much of the security required for such credit was other than the grain elevator.

Another question asked was: "If you had more alternatives to financing, would different sales channels be available to you?" All managers answered no. As soon as a railroad car is filled with grain, an operator can draw a draft on the terminal buyer for 90 percent of the value of the grain. This amount usually will cover the cost of purchasing grain. Thus, operating capital during the harvest season posed no particular problem.

Another capital problem besides operating capital during the harvest season was financing grain in storage. Most of the firms fill their storage capacity with soybeans at the end of the harvest season and sell in the spring, causing a seasonal burden on capital requirements.

Facilities

Average bulk bin storage capacity in the 12 survey elevators was 57,000 bushels (Table 2). Storage capacity ranged from 202,730 bushels to 1,000 bushels, with two-thirds of the firms in the 18,000 to 60,000 bushel range. The firm with only 1,000 bushels of storage loaded di-

<table>
<thead>
<tr>
<th>Item</th>
<th>Per local grain elevator</th>
<th>Average</th>
<th>Most usual range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage capacity</td>
<td></td>
<td>57</td>
<td>18 to 60</td>
</tr>
<tr>
<td>Grain handled</td>
<td></td>
<td>216</td>
<td>100 to 350</td>
</tr>
<tr>
<td>Turnover1</td>
<td></td>
<td>3.4</td>
<td>2.2 to 6.1</td>
</tr>
</tbody>
</table>

1 Grain handled divided by storage capacity.

TABLE 2.—Storage Capacity and Grain Handled, 12 Local Grain Elevators, Louisiana, 1960.
rectly from the dumping pit into railroad cars. Storage in this facility was rarely used.

All the storage capacity of the 12 firms was of the bulk bin type except about 6,000 bushels of flat bulk storage used by one firm. Feed and cottonseed storage facilities were also available to two operators for grain storage at certain times if needed.

The firms varied as to the volume of grain handled in relation to storage capacity. Most of the 12 firms handled grain amounting to between two and six times their storage capacity. However, one firm handled less grain than its storage capacity while another firm handled more than 200 times as much grain as its storage capacity.

Most of the firms began operating during the last 10 years but several had made considerable changes in their plants since beginning operations. Five of the firms had added more storage. One had added a dryer and cleaner. Another had added temperature sensing equipment. Most of the firms began with much less than their present grain handling capacity.

Two operators planned to enlarge the dumping capacity and speed for handling grain. One firm planned to begin barge shipments. Enlarged storage was the goal of five firms.

The firms’ managers were asked what changes would be made if they were rebuilding. Some firms had just started operations and operators, therefore, had no comments. Many of the comments as to changes that might be made were caused by rapid increases in grain production and thus by the volume of grain available to elevators in the area. This is especially true of the amount of storage space and adequacy of facilities such as dryers, cleaners, and dump pits. Some of the comments as to changes that would be made if rebuilding should be particularly interesting to anyone considering entering this business. They were:

Locate out of town.
Locate on rail.
Locate on rail and water.
Locate away from rail (causes bottlenecks in truck traffic around elevator).

Employ an engineer experienced with grain elevator operations to help design the facility and supervise construction.

Locate on higher ground.

Arrange facilities differently; e.g., provide for weighing and dumping at the same place, thus allowing for weighing before and after dumping without moving the truck.

Use different building material; e.g., steel or mono-liquid concrete rather than wood.
Install larger dryer and cleaner.
Install belts instead of screw conveyors.
Build all gravity flow bins with hopper bottoms.
Build larger dumping pit.
Build larger scales.
Design for ease in expansion.
Build more storage.
Employ a contractor to construct the facilities.
Provide adequate building bond for contractors.

**Kind of Grain Handled**

Seventy percent of the grain handled by local elevators in Louisiana was soybeans. Soybeans and corn together amounted to 84 percent (Table 3). The balance consisted of wheat and oats. Both corn and soybeans are harvested in the fall season and, although the corn harvest peak is reached somewhat sooner than the peak for soybeans, the harvest season of the two grains overlap. Wheat and oats are largely harvested in the summer.

The kind of grain handled by local grain elevators in various regions of the country is different. However, considering the large proportion of soybeans handled by Louisiana elevators, the problem of seasonality is probably somewhat more critical than in other areas of the nation. Estimated receipts of grain in 1960, by months, for 12 local elevators in Louisiana are shown in Table 4.

**Grain Procurement**

Ten firms purchased all of their grain from farmers at the time of delivery. One firm contracted with farmers for 10 percent of its

<table>
<thead>
<tr>
<th>Kind of Grain</th>
<th>Louisiana</th>
<th>Illinois</th>
<th>Kansas</th>
</tr>
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<tbody>
<tr>
<td>Soybeans</td>
<td>70</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Corn</td>
<td>14</td>
<td>55</td>
<td>9</td>
</tr>
<tr>
<td>Oats</td>
<td>5</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Wheat</td>
<td>11</td>
<td>11</td>
<td>60</td>
</tr>
<tr>
<td>Grain sorghum</td>
<td>—1</td>
<td>—1</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

1None reported.

Source: C. P. Schumaier, *Truck Shipment of Grain in Illinois, 1956*, AERR 25, Department of Agricultural Economics, University of Illinois, College of Agriculture, August 1958 and Orlo Sorenson, *Truck Transportation of Kansas Grain*, Agricultural Economics Report No. 97, Kansas Agricultural Experiment Station, June 1961. Louisiana data were estimated from the survey.
grain at the beginning of the growing season and another contracted 33 per cent. All grain was purchased outright rather than handled for the account of the farmer.

Four firms hedged in the futures market against stored grain and two hedged against grain contracts with farmers. Some firms hedged only part of the operation.

The 12 grain elevators in the survey obtained grain from an average radius of 13.33 miles. The range was from less than 1 mile to 35 miles. The relatively short distance was probably the result of farmers selling to the nearest elevator. The pressure to finish a grain harvest during favorable weather resulted in a premium on the time of farmers and their equipment, thus tending to induce them to sell at the nearest elevator. However, there were probably enough farmers who shopped for price to maintain fairly competitive prices among elevators.

**Grain Sales**

A large proportion of total sales were made either to terminal merchants or to processors (Table 5). Terminal merchant buyers primarily handle Louisiana grain through export elevators located on the Mississippi River at Port Allen and New Orleans, Louisiana. Processors were either feed or oil mill operators.

Some corn and oats are sold directly to farmers and some of each of the four grains listed are sold to other local elevators. Some local elevators were not well equipped to dry and blend grain and thus found it advantageous to sell to other local elevators which were well equipped to do this job before shipping to terminal markets or storing for sale later in the season.

Whether or not a broker was used varied widely between operators and between grains (Table 6). For example, some sold as high as 70

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**TABLE 4.—Estimated Receipts of Grain by 12 Local Elevators, Louisiana, 1960**

<table>
<thead>
<tr>
<th>Month</th>
<th>1,000 bushels</th>
<th>Percent of total</th>
</tr>
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<tbody>
<tr>
<td>May</td>
<td>15</td>
<td>.6</td>
</tr>
<tr>
<td>June</td>
<td>376</td>
<td>14.5</td>
</tr>
<tr>
<td>July</td>
<td>13</td>
<td>.5</td>
</tr>
<tr>
<td>August</td>
<td>54</td>
<td>2.1</td>
</tr>
<tr>
<td>September</td>
<td>188</td>
<td>7.2</td>
</tr>
<tr>
<td>October</td>
<td>879</td>
<td>33.9</td>
</tr>
<tr>
<td>November</td>
<td>909</td>
<td>35.0</td>
</tr>
<tr>
<td>December</td>
<td>162</td>
<td>6.2</td>
</tr>
<tr>
<td>Total</td>
<td>2,596</td>
<td>100.0</td>
</tr>
</tbody>
</table>

1Receipts in January through April were insignificant.

Source: Unpublished data of the Louisiana Agricultural Experiment Station.
percent of their soybeans through brokers whereas others sold as little as 5 percent in this manner.

Local grain elevator operators apparently feel more need for brokers' services when selling to terminal merchants than when selling to farmers or the processing market. Nearly all the wheat is sold to terminal merchants as is a relatively large proportion of soybeans.

Two main bases of selling grain were reported by the 12 local grain elevator operators (Table 7). They are described here as “on track” and “to arrive.” “On track” means that the buyer assumes the risk of a price change and pays the freight to the point of delivery. “To arrive” means that the buyer bears the risk of a price change but the seller pays the freight to the point of delivery. None of the 12 operators sold on consignment.
One operator remarked that local grain elevators are generally not in a position to extend more favorable terms of sale to any except those whose credit and business integrity is unquestionable. He observed that a loss of one or two truckloads of grain would eliminate any profits a small firm, such as his own, could expect during a season. Such a situation probably precludes some sales that could otherwise be favorably consummated with local feed mills and results in a certain amount of crosshauling of feed grains.

**Pricing**

Gross margins reported by the 12 elevators, excluding a margin for transportation to a terminal market, ranged from 5 to 20 percent on purchases. The most typical gross margin sought in the industry, however, is 10 cents per bushel. Allied activities such as drying, blending, and storing grain help to achieve or even exceed the margin sought. Often the value of grain is enhanced by drying. And two or more lots of poor quality grain are sometimes blended into one lot of a better quality grain if the original lots were of poor quality for different reasons. Moreover, Martin and others report that 2 to 4 percent more corn can be saved from a crop by early harvesting if there are drying facilities to handle high moisture corn.

Extra income from storage is often earned by elevator operators who, at the end of the season, hold grain in the facilities for sale later in the year. In fact, holding grain even for a short period of time often contributes to an increased margin if it does not interfere with the volume that would otherwise be handled. For example, prices of soybeans delivered to export elevators in Louisiana began seasonal increases by mid-September in two out of the past four years and by mid-October in three out of the four years (Figure 2). In one year, however, the seasonal price increase did not begin until mid-November.

On the other hand, with falling prices it is often to the elevator operator’s advantage to sell grain as quickly as possible after purchasing

---

or to hedge purchases in the futures market. One operator reported this to be especially true of early season corn purchases. The Louisiana corn crop matures slightly earlier than in the North Central region of the United States. Thus, some corn is being received in Louisiana elevators while terminal market prices are still seasonally falling.

Many of the managers were concerned with grading and pricing standards. They mentioned that grades at grain terminals were inconsistent or lower than had been measured before shipping the grain to them. However, the main concern was the confusion caused by so many standards. Among the standards used were (1) export, (2) processing, and (3) U.S.D.A. Each of these standards emphasizes different factors as bases for grading and pricing.

Under one system of pricing a farmer may be quoted a relatively high base price for grain but a severe set of price discounts will be applied to the grain for factors that do not measure up in quality. Under another system a relatively low base price will be offered with less severe discounts for quality factors.

Other confusing techniques in merchandising grain also exist in the
industry. A local association of elevators in Louisiana could eliminate
much of this type of confusion, but there was no such organization in
existence at the time of the survey.  
A question designed to describe the public relations program of the
local grain elevators and to discover problems in this matter was
asked in the survey. The only problem reported was a number of mis-
understandings with growers arising primarily from various pricing
and discounting procedures used by different elevator operators. Al-
though none of the elevator operators maintained a conscious formal
program in community relations, relations with the communities in
which they were located were otherwise good.

The average number of competitors reported by the 12 firms
was 5.6. The range was from none to 17. However, the firm which
reported 17 competitors considered a large portion of the Mississippi
Delta as a potential area of grain procurement, although he obtained
no grain at distances over 35 miles. He stated that if his prices were
out of line other firms would be potential buyers from his suppliers.

Each firm was asked whether the number of competitors was too
large for each to operate efficiently. Three firms answered yes. Two
stated that there were not too many but that any more would be too
many. Seven firms stated flatly that there were not too many elevators
in their area. Most managers were of the opinion that service (a form
of non-price competition) was used more than price as a competitive
tool.

Sideline Activities

Eight of the 12 grain elevator firms also sold farm supplies. This was
not a complete line of farm supplies, but usually consisted of items
needed to grow grain, such as seed, fertilizer, insecticides, and other
chemicals. Two firms also operated feed mills in conjunction with the
elevator. Six firms operated cotton gins. A recent shift to soybeans on
land formerly devoted to cotton probably encouraged gin owners to
enter the elevator business. Seven owners of grain elevators were also
farmers.

Only 2 of the 12 firms stored grain for farmers on a custom basis.
Six firms dried grain and 7 firms cleaned grain for growers.

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5On February 14, 1963, a charter was issued to the newly formed Louisiana Grain
and Feed Dealers Association, Inc. The association includes local grain elevator opera-
tors as well as feed millers, terminal merchants and others. The present mailing
address of the association is c/o C. E. Pope, Secretary-Treasurer, Knapp Hall, L.S.U.,
Baton Rouge, Louisiana. Also, a number of local grain elevator operators in Louisiana
are members of the Mid-South Grain Shippers' Association.
Uncertainty and the Future

Uncertainty associated with federal farm programs in the future was a major concern of grain elevator operators in Louisiana. Changing the policy on grain, cotton, or any other farm commodity produced in the area causes a shift in land use. Grain elevators are rather specialized facilities that would have little alternative use in the event of a change that would decrease grain production in the area. Investments in such facilities must be recovered rather quickly in view of such uncertainty.

All of the operators interviewed expressed optimism as to the future of the local grain elevator business in Louisiana. However, two operators stated that there were enough elevators and that in a few years competition would be keener. One operator stated that the future depended upon the success of farmers in growing and marketing grains.

Problem Areas

There are many factors to consider in building and operating local grain elevators. Before undertaking such an operation one should consult other grain elevator operators in the area, written material on the subject, and technical experts in the field. Newsletters, price bulletins, trade journals, and newspapers were all listed by the operators in the survey as publications useful in planning and guidance. Some firms also listed grain brokers as a good source of information.

Some “benchmark” data for appraising local grain elevator opera-
tions is shown in Appendix D. The operation presented is one which just breaks even on a cash basis (before depreciation but after interest and principal payments) while handling 216,000 bushels of grain annually in a concrete stave type elevator with 55,000 bushels of storage capacity. Income, costs, and investment data are for a typical type of operation and a relatively new elevator. Total cost after depreciation and an imputed return of 6 percent on one-half the original investment (in place of interest and principal payments) is also shown.

More than 216,000 bushels could probably be handled with very little increase in total cost and less than 216,000 bushels would decrease total cost very little. Thus, a decrease in volume would tend to intensify and an increase would tend to decrease problems. For example, less than 216,000 bushels of grain handled would likely increase the payout period to more than 8.1 years and a greater volume would reduce the payout period.

These synthesized data are based on intense observation of the operation of three firms and provide a reasonable framework or “benchmark” from which to analyze other situations. Individual operators, even with different types of operations will find these benchmarks useful in appraising their own operations.

17
Volume of Grain Handled

Hall reported that merchandising costs for new country elevators in the Midwest ranged from 5.08 cents per bushel for an elevator with 20,000 bushels of storage capacity through which 250,000 bushels of grain are handled to 2.63 cents per bushel for an elevator with 250,000 bushels of storage capacity through which 1.5 million bushels are handled. Such studies tend to substantiate the contention of some local grain elevator operators in Louisiana that there are too many local elevators for the available volume of grain. They contend that margins could be reduced substantially or services improved if there were fewer elevators handling the available grain or if more grain were available for the same number of elevators.

Trends in grain production in Louisiana are shown in Table 8. Soybean production, nearly all of which is first handled by local grain elevators in Louisiana, has increased greatly over the 1945-54 average. This increase has come about in two ways. Acreage has increased fivefold and production per acre has nearly doubled. Government policy, not only with respect to soybean production but other agricultural commodities competing for the use of land, will largely determine the amount and quality of land that will be used for soybeans in the area in the future.

Individual elevator operators attempt to increase production per acre in the area from which they procure by encouraging better cultural practices and development of improved cultural practices, better varieties, and the like. A checklist of various devices that might be used to increase local grain production would be useful to grain elevator operators, farmers, and others interested in the economic development of the area.

Kind of Grain Handled

With a given facility more grain can be handled and profits probably increased, or problems decreased, if receipts can be spread over a

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<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1,000 bushels)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td>618</td>
<td>1,936</td>
<td>2,295</td>
<td>2,499</td>
<td>2,860</td>
<td>3,552</td>
<td>5,184</td>
</tr>
<tr>
<td>Corn</td>
<td>14,963</td>
<td>17,640</td>
<td>15,390</td>
<td>12,052</td>
<td>14,672</td>
<td>16,269</td>
<td>9,126</td>
</tr>
<tr>
<td>Oats</td>
<td>2,192</td>
<td>4,092</td>
<td>3,472</td>
<td>2,565</td>
<td>1,352</td>
<td>2,573</td>
<td>1,400</td>
</tr>
<tr>
<td>Wheat</td>
<td>____</td>
<td>374</td>
<td>700</td>
<td>1,344</td>
<td>672</td>
<td>1,200</td>
<td>832</td>
</tr>
<tr>
<td>Grain Sorghum</td>
<td>46</td>
<td>250</td>
<td>115</td>
<td>175</td>
<td>600</td>
<td>272</td>
<td>162</td>
</tr>
</tbody>
</table>

longer period of time. The costs indicated in Appendix D for local grain elevator operations in Louisiana are much higher than that reported by Hall. This is probably because of the relatively high concentration of soybeans handled by Louisiana elevators for which facilities must be provided but for which there is little use during the remainder of the year, compared with similar operations in the Midwest. Moreover, North Central region operations generally handle much more government owned and farm stored grain in off seasons than do those in Louisiana. Practically no government and farm stored grain is handled by local elevators in Louisiana, compared with more than 15 percent in the North Central region.

This logic tends to support those who contend that there are not too many local grain elevators in the area. Inadequate facilities for handling the crop can be just as detrimental to the industry as too many facilities.

Table 8 indicates that corn, although somewhat erratic in production from year to year, sustained a relatively high rate of production until 1960. Actually much of the corn produced in Louisiana is fed on the same farms where grown or is sold directly to neighboring farms, itinerant truckers, feed mills, terminal grain merchants, or in some other way bypasses local grain elevators. The amount that does pass through local elevators, however, is important to them and could easily mean the difference between a profit and a loss. In recent years, with the advent of an increased number of local elevators and thus a more dependable market, a larger part of the corn crop has been handled by local grain elevators.

Local grain elevator operators in Louisiana individually attempt to spread their season of operation by encouraging the development and planting of varieties that mature at different times and by encouraging the planting of different kinds of grain in the area.

**Gross Margins**

The operation shown in Appendix D assumes an average gross margin of 10 cents for each bushel handled. An extra amount would need to be charged for transportation to the terminal market. Since margins needed for transportation vary slightly with distance to the terminal market, it is not included in the margin shown. The average 10 cent margin, along with other income shown, would cover the costs of handling, buying, selling, drying, storage, blending, and otherwise merchandising the grain.

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7Ibid.
An increased gross margin would increase income, provided purchases did not decrease as a result. Or a decreased gross margin might increase volume provided competitors did not follow. A better understanding by the industry of costs and trading practices such as pricing, grading, weighing, and contracts would be of great value. An industry association could then, if interested, more easily minimize the problems caused by the confusion noted previously through standardizing trading practices. And, with such knowledge, individual operators could then more readily determine how their business was faring as an operating season progressed.

**Sideline Activities**

Grain elevator operations typically use certain facilities and key personnel in common with other operations, such as a farm supply store or others mentioned previously. The operation in Appendix D assumes that other operations would contribute $7,600 toward the manager's and assistant manager's salary and to such items as roads, railroad tracks, land and allied expenditures used in common with the elevator operation. Elevator operators not able to profitably utilize facilities and key personnel in other operations when not needed for the elevator operation are likely to have a critical problem with costs of operations and/or retaining needed personnel.

Miscellaneous income from weighing, handling government grain, and other sources sometimes present opportunities. Such items for elevator operations in Louisiana appear negligible compared with grain elevator operations in other regions of the nation.

**Investment Costs and Capital Requirements**

Item IV of Appendix D summarizes estimated funds needed for building an elevator of the type used in this analysis. One of the foremost among the problems pointed up by this study is the terms of loans available to grain elevator operations for facility loans. Although an elevator structure physically will easily last more than 15 years, creditors almost inevitably require that facility loans be repaid in 5 years or less. Moreover, creditors ordinarily loan only 50 percent of the investment or less and usually require other assets for security. If longer term loans could be developed on a sound basis, interest and principal payments could be reduced and one of the most pressing problems of the industry would be solved.

The data on required investment in Appendix D is for concrete stave type storage. Wood or metal structures would cost less initially, but would probably be a little more expensive to maintain. Other types of storage might cost more. The efficiency of various types of construc-
tion and of varying other aspects of a grain elevator operation in Louisiana is not well known.

Other investment costs might vary from the investment shown in Appendix D. For example, it is quite possible that property taxes might be waived and other aids rendered under Louisiana's industry inducement program. Site and other costs also might vary substantially in a given situation. In this study a wide range of investment costs was noted. While the data presented in Appendix D were carefully collected and should be useful as benchmarks, study is needed to determine why investment costs vary, so that such factors can be more readily considered if further expansion of the industry is undertaken or individual facilities are rebuilt.

Operating Costs and Returns

A study of costs and returns by a standardized accounting procedure is needed. Most records kept by the firms were adequate for tax purposes or banking but not very adequate for economic analysis. Practically every elevator maintains a different set of accounts so that a comparative analysis would be very difficult indeed. Only in total, and after a year's operation, could an operator tell how his firm fared for the year.

When the records resulting from an adequate accounting procedure are compared with those of previous seasons of operations, industry averages, or other benchmarks, problem areas in costs and returns can be more readily delineated and measures taken to solve them. In fact one study contends that successful local elevator operations usually are associated with adequate accounting procedures. A local elevator trade association could be instrumental in achieving the type of standardized accounting procedure needed for this purpose.

Some benchmark cost and return data are presented in Appendix D and some of it has been discussed in previous sections of this report. While this data will be useful to the typical operator in making a comparative analysis with the operation of his firm, and to a lesser extent for atypical operations, much more such data are needed if problems of the various sizes and types of operation are to be readily identified and needed changes made. Also more detailed cost data are needed to help effect more standardized trading practices as pointed out previously.

Storage Activity

A better understanding of storage costs and effective seasonal grain prices to local elevators in Louisiana would also be of value to the

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21
industry. During this survey, conducted in the summer of 1961, practically all the elevator operators expressed an interest in expanding storage capacity. During the 1960-61 season the price of soybeans rose from a seasonal low of $2.17 per bushel in November to $3.30 in April, an increase of $1.13 per bushel. Undoubtedly, soybean storage was very profitable in 1960-61 for those who had not hedged and for those who did not hedge the full amount of grain stored.

Whether storage without hedging by local grain elevators is a sound practice is a problem for local elevator managers in Louisiana. Actually, one operator complained that he was not able to use the futures market effectively at certain times of the year because of the distance and direction of Louisiana from the Chicago market.

If the futures market cannot be depended upon to indicate the profitability of storage in Louisiana, experience over a longer period of time will determine whether expanded storage is sound practice. In particular years, such as 1960-61 when there was a large rise in prices, those with a large amount of storage capacity in relation to the volume of grain handled will operate profitably. In years such as 1959-60 they will probably operate at a loss while those with a small amount of storage capacity in relation to the volume of grain handled will operate profitably.

Other Problem Areas; Some Suggested Solutions

During the survey a number of other problems were enumerated by elevator operators. These are presented below.

1. An adequate number of railroad cars was not always available.
2. Many of the railroad cars assigned to elevators contained holes that would allow grain to be lost if not repaired before loading.
3. Railroad cars frequently were held for 90 days at the terminal market before unloading, increasing the chances for quality deterioration of the grain for which the local elevator operator was responsible until unloaded. Moreover, the local grain elevator operator has 10 percent of the value invested in the grain until it is finally unloaded at the terminal market.
4. Available trucks for shipping grain to terminal markets were reported as inadequate during certain seasons of the year.
5. Another problem concerns successful financial management. When needed working capital is invested in an elevator or any other fixed asset, serious problems often result. Although few problems were reported in the survey with regard to working capital for the local grain elevator, working capital for other enterprises conducted by some operators was reported as a problem resulting from investing too much in the grain elevator. In the other types of business, discounts are fre-
quently allowed in the trade for prompt payment of bills. Such discounts are frequently forfeited when working capital is scarce.

6. Some operators expressed a fear that national grain merchandising operations would soon enter the competitive structure of the area. These large businesses with better access to capital and experience were particularly feared by those who would be vulnerable to competition from a local elevator located on a river. In 1961, local elevators located on some rivers in Louisiana would have had a transportation advantage over nearby country elevators not located on these rivers.

7. A big problem with Louisiana soybeans is stinkbug damage. Because of the prevalence of this problem in the area, terminal merchants purchased soybeans from Louisiana elevators only on a U.S. No. 1 basis, whereas the common grade used for purchasing beans from further north is U.S. No. 2. The base price and schedule of discounts for No. 1 soybeans is such that soybean prices are severely discounted when stinkbug damage is found. A problem then is to find ways to minimize stinkbug damage.

To justify the basis of trading of U.S. No. 1 soybeans in Louisiana, terminal merchants report that many foreign markets purchase soybeans for table consumption rather than crushing for oil. They report that stinkbug damage lowers the quality of soybeans, especially for table consumption, resulting in severe price discounts to them for damaged soybeans.

It has been suggested that such damage does not warrant the severe discounts applied for this factor but that this and other trading practices used by some terminal merchants are used as an excuse to shade prices in the southern areas where competition for the available grain is not so intense. If this is the case only a more competitive market seems to hold much promise for relief. Such a market now appears to be emerging. The rapid growth of local grain elevators in Louisiana has been exceeded by that of markets at grain export facilities on the Gulf coast.

8. Because of moisture, insects, and perhaps other reasons, corn does not store well for long periods of time in Louisiana unless the moisture content is 13 percent or less. U.S. No. 2 corn may contain 15.5 percent moisture and this is the basis on which it is normally traded. Although a bushel of 13 percent corn may contain a greater amount of nutrients, no premium is given in the trade for it over corn with up to 15.5 percent moisture. A problem then would be to determine if such corn is superior to high moisture corn and if so, to develop a premium market for the 13 percent corn.

9. A material change in government policy with respect to feed grain in 1961 tended to decrease the amount of corn that would have
been produced in the area.\textsuperscript{11} Under the new program, including slight subsequent changes, farmers are given great incentives for retiring up to 40 percent of their corn acreage and in some cases 100 percent. This is only one example of how government policy with respect to land use can affect local grain elevator operations. A problem for local grain elevator operators is to press for equitable solutions to such policy problems.

10. The difficulty experienced by some elevator operators in selling feed grain to local feed processors suggests consideration of a terminal or subterminal market in the producing area. Among the factors to be considered are (1) the extent to which a terminal market would be in a better position to deal with those whose business integrity and capabilities are not yet proven, (2) the volume of grain to be handled through such a market, (3) the role of such a market in importing feed grains into the area during certain periods of the year, and (4) the possibility of locating the market on one of the rivers in the area in order to realize cheaper transportation on feed grain imported into the area. A study of the economic feasibility of such a market would develop facts needed to come to a successful conclusion to this question.

11. Relations of elevators to the communities in which they were located, with few exceptions, were quite good. Some problems with growers resulted from the pricing confusion mentioned previously. Since, however, the industry is one of many small independent firms, their role in the economic structure of the state is probably not well known. Some way needs to be devised for these small firms to gain more favorable community attitudes such as large firms often enjoy.

\textbf{Summary and Conclusions}

Basically, local grain elevators consolidate small lots of grain purchased from farmers into large truckload or carload lots and sell it to terminal merchants, processors, and others. This report describes various aspects of this operation in Louisiana with special attention to delineating problems in the industry. Further research would aid in developing the type of data needed to solve some of these problems.

Data for this study were obtained from a survey of 15 of the 29 local grain elevators in Louisiana in 1960, including an intense study of 3 such firms, and from consultation with officers of the Mid-South Grain Shippers Association. The 29 elevators, 24 of which began operations since 1954, have been very successful. There are, however, many problems faced by the industry.

Although the most common form of business organization found in

the industry in Louisiana was the corporation, management usually was closely associated with the ownership of the firms. And, with few exceptions, the firms were single unit operations. Owning rather than leasing land and facilities was the most usual situation.

Adequate labor was reported even though labor requirements of a local elevator are quite seasonal. Practically every operator conducted other business into which he could weave at least some of the key labor when not needed at the elevator. Where such a situation does not exist, there doubtlessly are problems that have to be overcome in some other way by local grain elevator operators.

Capital invested in fixed facilities averaged $146,000 for the 12 survey elevators, ranging from $20,000 to $350,000. Total investment in fixed facilities in the industry amounts to more than $4 million. With regard to capital for fixed facilities, a sound basis for longer term loans needs to be found. Most loans for fixed facilities were for 5 years or less, whereas most of the facilities would last 15 years or longer. Moreover, the facility usually was not considered as the main security for the loan by available credit sources. Rather, they looked to other assets of the operator first. Underlying this attitude toward loans was the relative infancy of this type of business in Louisiana. Local creditors have little experience with this type of operation. And the uncertainty of various government farm policy programs affecting future land use in the area also tends to create such an attitude.

Operating capital, except for financing grain in storage, posed no particular problems. As soon as grain is sold and loaded into a railroad car, a local operator can usually draw a draft on the terminal buyer for 90 percent of the sale price, normally enough to pay the cost of purchasing the grain.

During a season, an elevator ordinarily handles several times as much grain as there is storage capacity in the facility. At the end of the season, however, operators usually attempt to store grain in the facility which, up to then, was needed for working space, creating a relatively large demand for funds to finance grain in storage.

Investment of working capital needed for other enterprises conducted by the grain elevator operator in fixed assets such as a grain elevator can also result in problems for the operator in the other enterprises.

Although many of the firms had been operating only a short time, extensive changes had been made in the facilities, including increased storage and other changes designed to increase the capacity and efficiency of the plants. Others were planning such changes at the time of the survey. And still other changes would have been made in the physical facilities if the facilities were being rebuilt at the present time.

Eighty-four percent of the grain handled by the 12 survey elevators
was soybeans and corn, both largely harvested by growers and received by local grain elevators in the fall months in Louisiana. Grain elevator operators attempt to spread the season of operation by encouraging production of varieties maturing at different times and planting of different kinds of grain such as wheat and oats, which mature in the summer. When the season can be spread over a longer period, more grain can be handled with a given facility.

Usually the higher the volume of grain handled, the greater is the success of the elevator. Soybean production, the most important grain handled by local elevators in Louisiana, has nearly tripled since 1954 and is more than eight times greater than the 1945-54 average. Soybean production in the state now amounts to about five million bushels annually. There are a number of ways in which individual operators attempt to increase the volume of grain to be handled by their elevators.

Terminal grain merchants, operating out of elevators in Gulf ports, were the most important buyers of grain from local elevators in Louisiana. Other buyers included oil mills, feed mills, farmers, and other local grain elevators. Local elevators sometimes purchase grain from other local elevators because they are in a better position to dry, blend, store, or otherwise merchandise the grain.

A larger proportion of wheat and soybeans was sold through brokers than of corn and oats. And most of the grain was sold on a “to arrive” basis (buyer bears the risk of a price change during transit but the seller pays the freight to the point of delivery).

A great deal of confusion apparently reigns in the industry concerning pricing, although it is not usually mentioned as such. A local association of elevator operators could do much to eliminate this type of confusion but there was no such association in existence at the time of the survey. A better understanding of costs, pricing, grading, contracts, and other trading practices would be of considerable value to the industry.

The study also includes a framework for evaluating local grain elevator operations in Louisiana. This framework based on intense observation of three local elevator firms, presents synthesized “benchmark” data on costs and returns for the more typical type of operation handling an average volume of grain and breaking even. Problems and opportunities are discussed from this framework. However, much more such data are needed if the problems of the various sizes and types of operation are to be more readily identified and needed changes suggested.

Some firms are in need of more adequate accounting procedures for comparing costs and returns with previous seasons of operation, industry averages, and other benchmarks. Only then could comparative analy-
ses be made that would readily point to aspects of an operation that could be improved.

A better understanding of storage costs and probable returns from storage is also needed. Allied with this problem was a need for more knowledge on the conditions under which local grain elevator firms in Louisiana can use the futures market effectively.

Some way needs to be devised for the industry to gain more favorable community attitudes on a statewide basis such as large firms often enjoy. Since the industry is one of many small firms with practically no formal program in public relations, their vital role in the economic structure of the state is not well understood.

Also raised was the question of whether a terminal or subterminal market for feed grains consumed locally is needed or feasible. Many facts are needed to successfully answer this question.

Among other problems uncovered in the survey was the need for more adequate transportation for grain. Railroad cars, both in terms of numbers and quality, were cited, as was the need for more adequate truck transportation during certain seasons of the year.

Appendix

A. Directory of Local Grain Elevators in Louisiana, 1960

1. Briggs Elevator, Oak Grove
2. Brown Bros. Grain Elevator, Jonesville
3. Central Mill and Elevator Company, Mer Rouge
4. Concordia Grain Elevator, Ferriday
5. Crowville Elevator, Crowville
6. East Carroll Grain Cooperative, Lake Providence
7. Evangeline Cotton Oil Company, Ville Platte
8. Farmer's Elevator Company, Epps
10. Jonesville Grain Elevator, Jonesville
11. Madison Grain Company, Tallulah
12. McClendon Elevator, Bastrop
13. Mer Rouge Elevator, Mer Rouge
14. Monticello Elevator, Epps
15. Newellton Elevator, Newellton
16. Oak Ridge Grain Elevator, Oak Ridge
17. Peoples Moss Gin Company, Palmetto
18. Red Barn Fertilizer Company, Gilliam
19. Red Barn Fertilizer Company, Monroe
20. Sims Seed Company, Rayville
21. Southland Cotton Oil Company, Tallulah
22. St. Joseph Grain Elevator, St. Joseph
23. Tallulah Elevator and Feed Company, Tallulah
24. Terrell-Norris Seed Company, Lake Providence
25. United Elevator Company, Ferriday
26. Union Oil Mill, Bunkie
27. Warren and Cooty Grain Company, Lake Providence
28. Waverly Grain Cooperative, Waverly
29. Winnsboro Elevator Company, Winnsboro

27
B. Mail Questionnaire

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DEPARTMENT OF AGRICULTURAL ECONOMICS AND AGRIBUSINESS
LOUISIANA AGRICULTURAL EXPERIMENT STATION
LOUISIANA STATE UNIVERSITY

1. Name of Firm

2. What is the nature of your business? (For example, feed, seed and fertilizer retail store, feed mixing, sawmill, grain elevator, canning plant, etc.)

3. How long has this firm or its predecessor been in business?

4. Present type of ownership (Check one):
   - Private
   - Partnership
   - Cooperative
   - Corporation
   - Other (Specify)

5. Type of physical organization (Check one):
   - Single plant
   - Part of national chain
   - One of two or more in the state
   - Other (Specify)

6. (a) Size of service area for this plant (Fill in blanks below):
   - North ___________ miles
   - South ___________ miles
   - East ___________ miles
   - West ___________ miles

   (b) Number of parishes served

7. What is the estimated replacement value of your facility?

8. Number of employees (Fill in appropriate blanks):

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<thead>
<tr>
<th>Type</th>
<th>Permanent</th>
<th>Additional for Seasonal Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Manager</td>
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</tr>
<tr>
<td>Office Workers</td>
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<tr>
<td>Field Representatives</td>
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<tr>
<td>Servicemen</td>
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<tr>
<td>Laborers</td>
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<tr>
<td>Unskilled Operators</td>
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<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Volume of gross business during a typical year (Check opposite appropriate figure):

   |                    |           |                              |              |                |
   | Under $25,000      |           |                              |              |                |
   | 25,000- 49,999     |           |                              |              |                |
   | 50,000- 74,999     |           |                              |              |                |
   | 75,000- 99,999     |           |                              |              |                |
   | 100,000-124,999    |           |                              |              |                |
   | 125,000-149,999    |           |                              |              |                |
   | 150,000-174,999    |           |                              |              |                |
   | 175,000-199,999    |           |                              |              |                |
   | 200,000-249,999    |           |                              |              |                |
   | 250,000-299,999    |           |                              |              |                |
   | 300,000-349,999    |           |                              |              |                |
   | 350,000-399,999    |           |                              |              |                |
   | 400,000-449,999    |           |                              |              |                |
   | 450,000-499,999    |           |                              |              |                |
   | 500,000-599,999    |           |                              |              |                |
   | 600,000-699,999    |           |                              |              |                |
   | 700,000-799,999    |           |                              |              |                |
   | 800,000-899,999    |           |                              |              |                |
   | 900,000-999,999    |           |                              |              |                |
   | 1,000,000-1,499,999|           |                              |              |                |
   | 1,500,000-1,999,999|           |                              |              |                |
   | 2,000,000-over     |           |                              |              |                |

1 Note that the name of a firm does not always reflect the true nature of the business.

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C. Interview Schedule

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DEPARTMENT OF AGRICULTURAL ECONOMICS AND AGRIBUSINESS
LOUISIANA STATE UNIVERSITY

A STUDY OF PROBLEMS OF SMALL AGRICULTURAL BUSINESS GRAIN ELEVATORS

<table>
<thead>
<tr>
<th>Date</th>
<th>Enumerator</th>
</tr>
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<tbody>
<tr>
<td>Parish</td>
<td>Schedule No.</td>
</tr>
<tr>
<td>Name and Address of Firm</td>
<td>Telephone</td>
</tr>
<tr>
<td>Name of Person Interviewed</td>
<td>Position</td>
</tr>
</tbody>
</table>

I. Origin and Ownership

1. Year this firm or its predecessor started in business at this location?

2. Type of office at this location, i.e., single unit, branch, etc. (If this is a branch or line elevator, questions marked with * may be omitted.)

*3. What was the original type of ownership, and what is it now?

<table>
<thead>
<tr>
<th>Original Type of Ownership</th>
<th>Now Type of Ownership</th>
<th>Reason for change if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietor</td>
<td>Partnership</td>
<td>Corporation</td>
</tr>
</tbody>
</table>

*4. Do you plan to change the type of organization? If so, why?

5. Does your firm own or lease?

<table>
<thead>
<tr>
<th>Item</th>
<th>Reason(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>Own</td>
</tr>
<tr>
<td>Buildings</td>
<td></td>
</tr>
</tbody>
</table>

II. Physical Characteristics of Firms

1. Briefly describe the changes you would make in facilities if you were building it again regarding:

<table>
<thead>
<tr>
<th>Item</th>
<th>Reason(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Location</td>
<td></td>
</tr>
<tr>
<td>b. Transportation</td>
<td></td>
</tr>
<tr>
<td>c. Size of operation</td>
<td></td>
</tr>
<tr>
<td>d. Building material</td>
<td></td>
</tr>
<tr>
<td>e. Engineering</td>
<td></td>
</tr>
<tr>
<td>f. Legal service during</td>
<td></td>
</tr>
<tr>
<td>g. Contractor</td>
<td></td>
</tr>
<tr>
<td>h. Plant design</td>
<td></td>
</tr>
<tr>
<td>i. Equipment</td>
<td></td>
</tr>
<tr>
<td>j. Financing</td>
<td></td>
</tr>
<tr>
<td>k. Other (specify)</td>
<td></td>
</tr>
</tbody>
</table>

2. What major changes have you made in your facilities in the past ten years?

3. What major changes do you plan to make in the next five years?

4. What is your total storage capacity in bushels? Total ___________

<table>
<thead>
<tr>
<th>Bulk bins</th>
<th>Bulk flat</th>
<th>Sack</th>
</tr>
</thead>
</table>
5. Sideline activities of this plant—public scale, grind corn, crimp oats, pelletize feed, mix feed, sell farm supplies, other sideline activity? 

6. In this plant do you (circle appropriate activities) shell corn, dry grain, store grain, clean grain, other elevator activity? (explain) 

7. Square feet used primarily for office? Service area for sideline activities of elevator? 

III. Business and Growth 

1. Approximate size of your drawing area? Miles North East South West 

2. How many competitors do you feel you have? Located in the above area? 

3. Is this too many for each to operate efficiently? Explain 

4. How many bushels of grain was handled through your elevator during the 1960-61 season? 

Grain For Account of Elevator Custom Basis 
Soybeans 
Corn 
Oats 
Wheat 
Sorghum 
Other 

5. Sales of firm during 1960-61 season 

<table>
<thead>
<tr>
<th>Grain</th>
<th>For Account of Elevator</th>
<th>Custom Basis</th>
<th>Change in Physical Volume Over 5 Years Ago</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dollars</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IV. Seasonality of Business 

1. What is the maximum seasonal labor and operating capital needed during the following seasons? 

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of seasonal employees</th>
<th>Amount of operating capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 1 - May 31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 1 - August 31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>September 1 - November 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 1 - February 28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. What practices have you introduced to smooth out seasonal fluctuations? 

V. Employment 

1. Labor turnover 

<table>
<thead>
<tr>
<th>Number regularly employed by the firm</th>
<th>Number with you this year that were last year</th>
<th>Number quit or fired last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Monthly salary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hourly wage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seasonal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Does your firm provide employees with fringe benefits such as insurance, hospitalization, retirement plans, bonuses, profit sharing, paid vacation, automatic salary raises or other? (Do not include F.I.C.A. and unem-
ployment insurance taxes, or workers compensation insurance.)

3. Do you have any problems in obtaining, training or keeping labor?

VI. Management
1. What other types of business is the ownership or management of this firm affiliated with through ownership, management, financing or other arrangements?

2. If management is separate from ownership, what type of decisions does ownership have to approve? And what incentives are offered to stimulate management performances?

3. What specific publications do you use for planning and guidance?

4. What are the most important things you do in obtaining the understanding and good will of the ownership of the firm, customers, suppliers, labor, the public and government employees?

VII. Sales and Purchases
1. In general, what gross margin on grain do you average during the course of a year?

2. With your present volume, what markup on grain must you average to break even?

3. How many bushels of grain in a season must you handle to break even with your present markup?

4. Could you operate on a smaller margin if you handled more grain in your present facilities (i.e., without adding more storage capacity)?

5. How does competition affect prices you pay for grain?

6. Do farmers consider prices paid for grain more important than service? Explain

7. In selling, do the terms used in the sales contract vary from time to time?

8. Percent or bushels sold

<table>
<thead>
<tr>
<th>Through brokers</th>
<th>Soybeans</th>
<th>Corn</th>
<th>Oats</th>
<th>Wheat</th>
<th>Sorghum</th>
</tr>
</thead>
<tbody>
<tr>
<td>On consignment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“On track”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“To arrive”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Percent or bushels sold

<table>
<thead>
<tr>
<th>To farmers</th>
<th>Soybeans</th>
<th>Corn</th>
<th>Oats</th>
<th>Wheat</th>
<th>Sorghum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other country elevators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processor/mfg.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

31 “On consignment” means the seller bears the risk of price changes and also pays the freight to the point of delivery. “On track” means the buyer assumes the risk of price change and pays the freight to point of delivery. “To arrive” means the buyer bears the risk of price change but the seller pays the freight to the point of delivery.
10. Bushels purchased from
Farmers
Other country elevators
Other (specify)

<table>
<thead>
<tr>
<th>Grain</th>
<th>Soybeans</th>
<th>Corn</th>
<th>Oats</th>
<th>Wheat</th>
<th>Sorghum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Of grain purchases from farmers, how much was purchased outright at time of delivery? __________% or bu. Purchased on contract? __________% or bu. Received for storage? __________%

12. How many bushels did you store:

<table>
<thead>
<tr>
<th>Grain</th>
<th>Soybeans</th>
<th>Corn</th>
<th>Oats</th>
<th>Wheat</th>
<th>Sorghum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Do you use the futures market? ______ If so, is it to protect your position with regard to consignment selling? ______ Contract buying? ______ Storage for the account of the elevator? ______ To protect sale of depositor's grain for storage which the elevator did not own but could not store because of inadequate storage space? ______ Other? ______

14. What problems do you have with using the futures market?

VIII. Capital Requirements and Credit

1. Value of investment

<table>
<thead>
<tr>
<th>Initial</th>
<th>Present Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td></td>
</tr>
<tr>
<td>Facility</td>
<td></td>
</tr>
<tr>
<td>Furniture, fixtures, vehicular equip.</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

2. Value of inventory at peak ________ low ________ average ________

*3. Source of Capital

<table>
<thead>
<tr>
<th>Length</th>
<th>Frequency</th>
<th>Effective Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of Loan</td>
<td></td>
<td>Rate Required</td>
</tr>
<tr>
<td>Initial investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owners' equity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional or national merchant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major improvement or expansion (if more than one, use back)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retained earnings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional owner equity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional or national merchants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the present ratio of net worth to fixed assets?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is your fiscal year?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On the date your last books were closed for the year, what was:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Your ratio of receivables to current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Current assets to current liabilities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
*4. If you had more alternatives to financing, would different sales channels be available to you? Explain

*5. Would you add additional equipment or make extensive improvement or additions to your plant if more favorable credit arrangements could be obtained? Explain

IX. Miscellaneous
1. What do you feel are some of the effects of the federal farm programs on your business?

2. Have technological changes affected your business appreciably? Explain

3. Do you expect any major changes in your operation (services rendered, type of customer, source of supply) in the next few years? If yes, comment

4. Do you have any problems with grain grading standards? If yes, comment

5. Are transit privileges important to your business? If yes, explain

6. Have recent changes in railroad rates affected your business? If so, how?

7. Have you experienced difficulty in obtaining adequate railroad cars? Explain

8. Have you experienced difficulty in getting your grain unloaded and the sales transaction completed at terminal markets within reasonable lengths of time? If yes, explain

9. Do you determine cost per bushel? Merchandised Handled Dried Cleaned Stored Other

10. What do you think of the future of the country grain elevator business in Louisiana?

11. List major problems you feel are facing country elevator operators in Louisiana

33
D. A Framework for Appraising Local Grain Elevator Operations in Louisiana

I. Summary
A. Estimated average annual cash income, expense and surplus
   1. Estimated income $29,700
   2. Estimated operating expenses 19,300
   3. Estimated income available for debt repayment 10,400
   4. Estimated interest and principal payments 9,900
   5. Net surplus available over interest and principal payments $ 500
   6. Payout: $83,300
      $10,400 = 8.1 years before depreciation

B. Estimated annual total average income, expenses and surplus
   1. Estimated annual gross income $29,700
   2. Less operating expenses, depreciation and a return on the investment 27,400
   3. Net surplus $ 2,300

C. Estimated total funds required to finance costs of land, construction, equipment, etc.
   1. Cost of land $2,200
   2. Total buildings and equipment costs 78,400
   3. Escrowed interest during construction, etc. 2,700
   4. Total funds required $83,300

II. Details: Estimated average annual cash income, expenses, and surplus
A. Estimated income
   1. 216,000 bushels @ $0.10 gross margin $21,600
   2. Contribution to overhead from other operations 7,600
   3. Miscellaneous income $ 500
   4. Total $29,700

B. Less operating expenses
   1. Manager $ 6,000
   2. Assistant manager and bookkeeper 3,000
   3. Seasonal labor, 3 men @ $275 per month 2,800
   4. Fringe benefits @ 10% 1,200
   5. Elevator supplies and repairs 700
   6. Electricity 1,000
   7. Telephone and telegraph 200
   8. Insurance, facilities 500
   9. Insurance, grain 200
   10. Office supplies 100
   11. Legal and auditing 1,200
   12. Property taxes 600
   13. Reserve for contingencies 1,800
   14. Total estimated operating expenses $19,300

C. Estimated income available for debt repayment $10,400
D. Interest and principal payments $9,900
E. Net surplus available over interest and principal payments $ 500

III. Estimated total average annual income, expenses and surplus
A. Estimated annual gross income $29,700

1Not including a margin for transportation to terminal markets.
B. Costs
1. Operating expenses $19,300
2. Depreciation @ 15 years $5,600
3. Return on investment @ 6% on 1/2 of the original investment 2,500
4. Total $27,400

C. Net surplus $2,300

IV. Details: Estimated funds required to finance costs of land, buildings, equipment, construction, etc.
A. Cost of land
1. 2 acres @ $1,000 $2,000
2. Title examination 200
3. Total cost of land $2,200

B. Total building costs $76,500

C. Other equipment
1. Office $900
2. Grain grading 1,000
3. Total $1,900

D. Escrowed interest and other costs during construction
1. Escrowed interest $1,200
2. Administrative and legal cost 1,500
3. Total $2,700

E. Total funds required $83,300

F. Equity capital $41,600

G. Interest and principal payments at 6% for 5 years remaining
   cost $9,900

V. Details: Estimated construction and equipment costs
A. Estimated storage and related equipment costs
1. Storage tanks, concrete staves, installed @ $.35 per bushel $19,200
2. Spouting and miscellaneous steel 2,200
3. Concrete foundation work 10,000
4. Scale, installed 5,500
5. Elevator and equipment 16,000
6. Cleaner and drier 1,800
7. Office 2,400
8. Installing other equipment 4,000
9. Total $61,100

B. Site development costs
1. Grading, filling and drainage $500
2. Hard surface road, 400
   sq. yds. @ $3.25 1,300
3. Railroad tracks 1,500
4. Water system 400
5. Total $3,700

C. Total construction costs $64,800
1. 8% engineer's fee 5,200
2. 10% reserve for contingencies 6,500
3. Total construction and equipment costs $76,500

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3Related businesses such as cotton gins, feed mills and farm supply stores, usually operated jointly with local grain elevators, use some of the facilities jointly with the elevator operation. One systematic estimate would allocate about 10 percent of the above costs to such operations.
Selected Bibliography


*Grain Market News*, Louisiana Department of Agriculture and Immigration, Baton Rouge, Louisiana.


Sorenson, Orlo, *Truck Transportation of Kansas Grain*, Agricultural Economics Report No. 97, Kansas Agricultural Experiment Station, Manhattan, Kansas, June 1961.


