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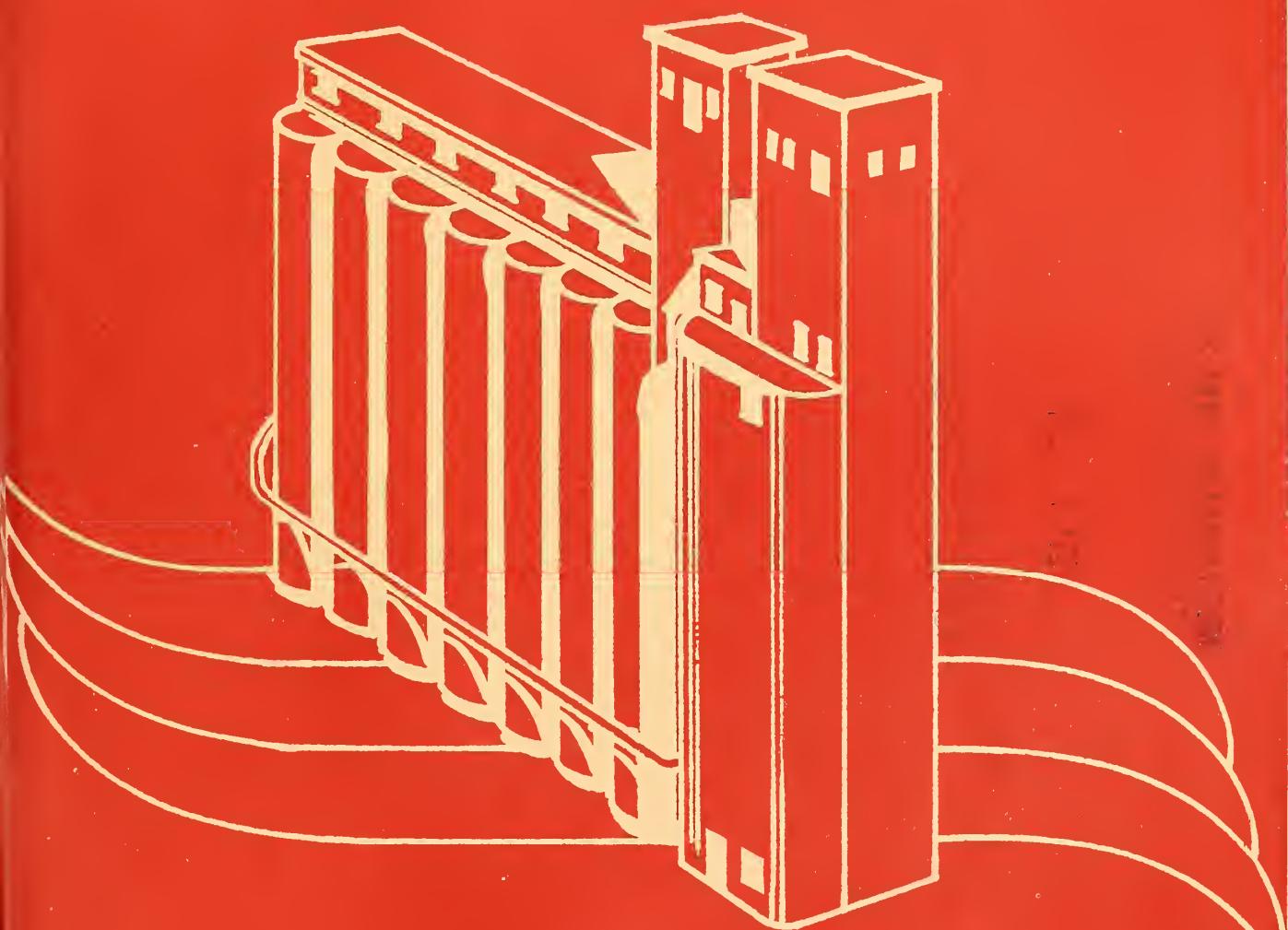
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A PLAN FOR INTEGRATED RICE MARKETING IN LOUISIANA

IMPLICATIONS
OF ACQUIRING
PROPRIETARY
RICE MILLS



SERVICE REPORT 130

FARMER COOPERATIVE SERVICE • U.S. DEPARTMENT OF AGRICULTURE

A PLAN FOR INTEGRATED RICE MARKETING IN LOUISIANA

Dale W. Wilson
David Volkin

Farmer Cooperative Service

U.S. Department of Agriculture

PREFACE

The American Grain Association, Lake Charles, Louisiana, asked Farmer Cooperative Service to study the feasibility of Louisiana rice growers acquiring from five to seven rice mills and to make recommendations about their operation on a cooperative basis.

An intensive evaluation of Louisiana rice production and marketing strongly indicated that the problem was greater than determining the economic and financial feasibility of acquiring five to seven rice mills. Additionally, it required fitting these mills into a cooperative marketing system radically different from the present system.

Stated briefly, the present "system" is one in which rice growers either market green rice direct to mills, or dry and store rice at farm or commercial--including cooperative--driers, then for the most part, offer the rice for sale to mills through bid procedures operated by the Louisiana Grain Exchange or the Louisiana Farm Bureau. A relatively small part of the crop--an estimated 10 percent--is sold through direct sale to the mills. Identity of individual lots is preserved. This practice results in inefficient use of storage facilities. And buyers' evaluation of grades and yields varies from one buyer to the other and leaves much to be desired.

Thus, acquisition of milling facilities could enable Louisiana rice farmers to obtain potential cost savings from operating the mills, participate in marketing their rice, and introduce changes in handling rice that could maximize economic benefits to themselves.

Seven rice mills were in the group first discussed by Mr. George Blair, executive vice president, AGA, to be included in the study.

When the study was formally initiated, however, one mill decided not to participate. Another mill, although willing to provide a limited amount of information, deferred full participation for the time being. Because of its organization structure, we did not obtain balance sheet data for a third mill.

We point out these factors to alert the reader that certain discussion in this report may from time to time refer only to three of the mills, and other times refer to four, five, or perhaps all six of the mills. For the most part, however, we discuss only five mills.

Data confidentiality was maintained by using different sequences of the letters A through F to identify the study mills in our discussion of their operating practices, financial condition, operating results, and unit costs.

At this point, two questions related to mill acquisition could be asked. The first question has to do with timing: Is this the proper time for producers to acquire mills?

The number of rice mills has been declining.

According to the Southern Rice Industry by Godwin, et al, fewer than 10 mills will be operating by the end of the present decade.

Assuming the validity of this projection, the remaining mills will probably strengthen their competitive position by integrating further back into the rice conditioning sector. One mill, for example, operates in three states and owns seven driers in Louisiana. Thus, we think acquisition of rice mills in the future will be more difficult and more expensive.

The second question is: Should a rice marketing cooperative purchase the five mills or build one large mill? Construction of a new mill is certainly a valid alternative to acquiring the five rice mills. Although a study of this alternative was beyond the scope of this study, we can list definite advantages a new mill would offer. For example, a new mill would enable a rice co-op to utilize the latest milling technology and the most efficient arrangement of facilities. The mill could be located in terms of least-cost transportation for inbound and outbound shipments. Finally, the association would not acquire old and possibly out-dated facilities and equipment.

There are, however, valid reasons for purchasing existing mills. Some of these are: (1) To acquire storage and milling capacity; (2) to obtain experienced mill personnel; (3) to obtain the support of producers that are now selling green rice to these mills; (4) to remove, in part, the competition for rough rice; and (5) to acquire mills from the owners, in part, by the issuance of stock thus requiring a lower total financial commitment from producers.

We believe a stronger case can be made for acquiring the five mills. That alternative gets a rice co-op into operations earlier and gives it valuable operating experience. In future years, a new mill could be built and the acquired mills could be phased out of the association's milling operations.

It is the purpose of this study to:

- . Analyze the economic and financial feasibility of acquiring five to seven rice mills;
- . Develop a concept for marketing rice for member producers on a cooperative basis; and
- . Evaluate the costs and benefits to member producers.

We obtained financial, operating, and statistical data during two field visits with mill operators, officials of American Rice Growers, the New Orleans Bank for Cooperatives, and staff personnel of the Agricultural Economics Department at Louisiana State University at Baton Rouge, Louisiana. Other information came from officials of the Agricultural Stabilization and Conservation Service at Alexandria, La.; the Louisiana Department of Agriculture; staff personnel of the U.S. Department of Agriculture's Economic Research Service and the Statistical Research Service in Washington, D. C.; and the Rice Millers Association in Washington, D. C.

This report is intended as a source of information for the use of various groups in the Louisiana rice industry. These groups include: producers, mills' drier-storage firms, rice marketing organizations, educational institutions, and others interested in improving rice farmers' income. This publication considers the present status of Louisiana rice marketing and proposes a grower-controlled, integrated marketing system.

The main text is divided into essentially two parts. The first part briefly describes the economic situation and marketing structure in the rice supply area and the financial background and milling costs of the study mills.

The purpose of this section is to provide an understanding of the Louisiana rice marketing situation. Such an understanding is basic to proposals for any changes in rice marketing.

The second part discusses our concept of an integrated cooperative marketing system.

Practically all tables and exhibits are included in the appendix. For purposes of clarification, a synopsis, or conspectus, briefly explains the purpose of basic information presented in the appendix material.

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A PLAN FOR INTEGRATED RICE MARKETING IN LOUISIANA

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RECOMMENDATIONS

This report recommends acquisition of the five study mills only if such an acquisition is an integral part of an overall coordinated rice marketing program organized to:

1. Handle 50 percent or more of Louisiana rice production;
2. Use marketing contracts with all producer-members;
3. Include only rice producers as voting members;
4. Assume control of the members' rice at the initial conditioning source;
5. Grade and commingle rice into the required lots and pools;
6. Provide storage and drier facilities in owned, rented, or contracted facilities;
7. Acquire initial equity financing from producers based on acreage commitments; and
8. Use capital retain certificates to build up net worth.

What can such a coordinated rice marketing program mean to a Louisiana producer?

In 1969, Arkansas rice producers received through their integrated cooperative marketing system 12 percent higher prices than Texas producers. The type of rice is not a factor in this difference since both states are major producers of long grain rice. We believe this price difference can be attributed largely to the advantages of an integrated system.

Thus under a similiar integrated marketing system, Louisiana farmers also could have received 12 percent higher prices. This would have meant 57 cents more per hundredweight in 1969. A Louisiana producer could have received an additional return of over \$19.00 an acre or about \$2,350 for an average production unit.

We also have estimated costs and returns of an integrated rice marketing cooperative for Louisiana based on 1970-71 data. The Rice Co-op handling 5.7 million barrels of rice should produce \$8.64 a barrel for distribution to growers, of which \$8.48 would be returned in cash and 16 cents in the form of per unit capital retain certificates. These retains would provide a \$923,400 addition to net worth, which should be more than adequate to pay amounts due under term obligations.

The \$8.48 net cash return compares with the average price of \$7.95 per barrel received by Louisiana farmers for the four years ending in '68, '69, '70, and '71. Louisiana farmers received in 1970-71 an average price of \$8.23 a barrel for long grain and \$7.78 for medium grain rice.

In short, what this report recommends is that Louisiana rice producers will have to make certain commitments to achieve a stronger voice in rice marketing.

SECTION I

PRESENT ECONOMIC SITUATION AND MARKETING STRUCTURE

Rice Production

Ninety-three percent of Louisiana's total rice production in 1971 was produced in 10 Southwest Louisiana parishes (Figure 1). This produced 11.3 million barrels, of which 62 percent were produced in Jefferson Davis, Acadia, and Vermilion parishes (Appendix Table 1).

Southwest Louisiana rice was 73 percent medium grain and 27 percent long grain. For the 1968-70 period, medium grain was 72 percent of the total production.

Rice was produced from 4,611 farm allotments in Southwest Louisiana (Appendix Table 2). The average allotment was 107 acres and the average production per allotment was 2,472 barrels, or an average yield of 23 barrels per acre.

Rice allotments are tied to the land in Southwest Louisiana rather than to the producer. Many of the allotments are farmed by tenants rather than the owner. The actual number of rice producers, including tenants, is 8,040, or almost twice that of farm allotments. However, our analysis of rice producers associated with cooperative driers and the five study mills points to a lower total number of producers.

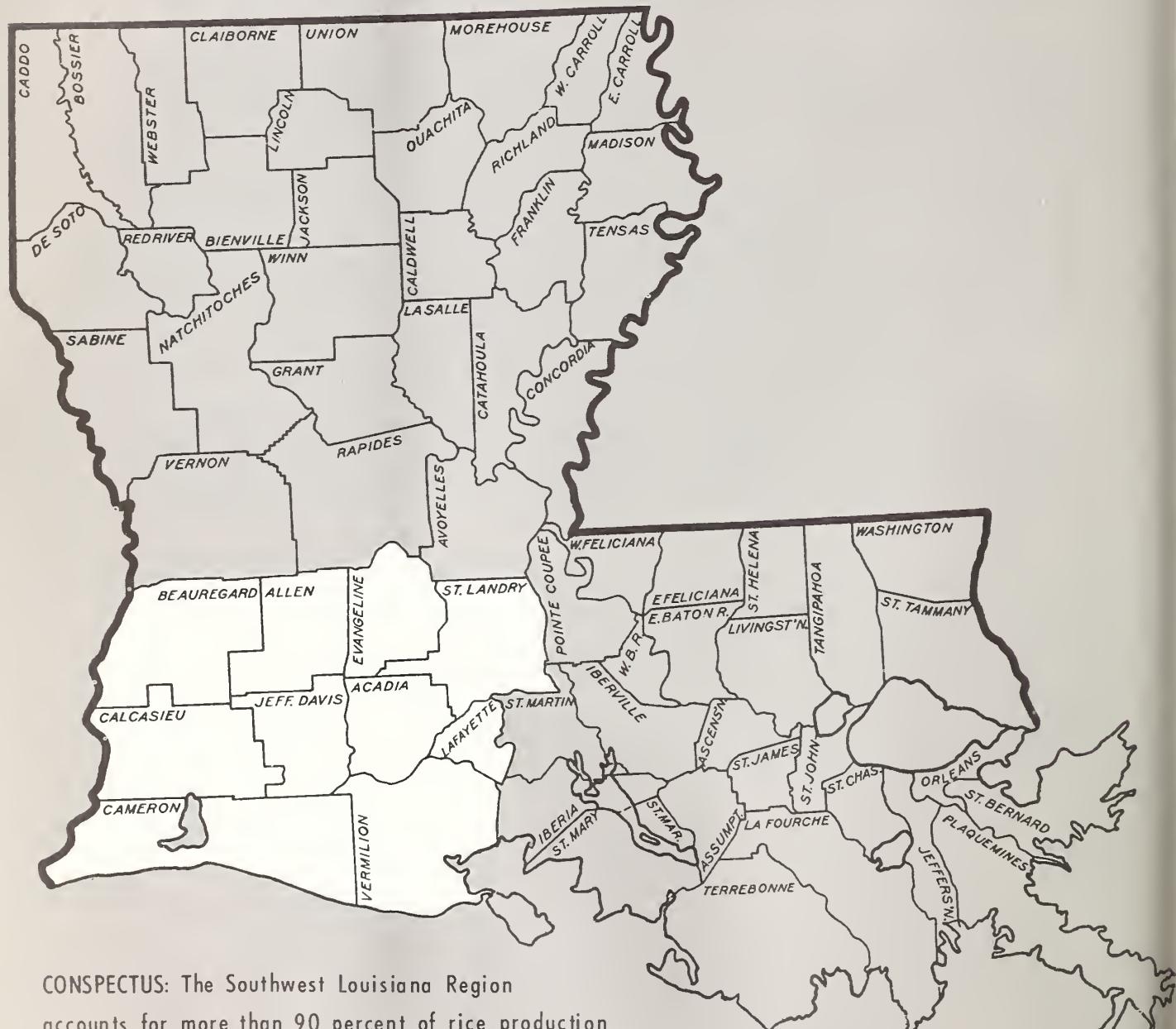
Marketing Structure and Flow of Rice in Louisiana

We estimated the total number of rice producers to be 5,786 in 10 southwestern and other outlying parishes (Appendix Table 3). The number of producers ranged from 1,847 in Acadia to 29 in Beauregard. Volume marketed by individual producers ranged from 830 barrels in Lafayette to 4,980 barrels in Calcasieu.

Rice storage capacity is estimated to be 20.1 million barrels for all types of storage (Appendix Table 4). These types included: farm, mill, cooperative, and proprietary commercial driers. The production area was estimated to have a total of 570 storage organizations (Appendix Table 5). We estimated the 16 Louisiana rice mills milled 11.4 million barrels in 1971 (Appendix Table 6). Acadia Parish has 53 percent of total milling volume compared with about 28 percent in Vermilion. Three of the 16 mills milled around 43 percent of the volume.

FIGURE 1

SOUTHWEST LOUISIANA RICE AREA



CONSPECTUS: The Southwest Louisiana Region
accounts for more than 90 percent of rice production
in the state and almost one-fourth of U.S. production.

The 16 Louisiana rice mills purchased an estimated 5.9 million barrels of green rice in 1971, equivalent to 51 percent of rice marketed in 1971 (Appendix Table 7). Fifty-nine percent of the green rice was milled by 4 of the 16 mills. More than 50 percent of the green rice was purchased by Acadia rice mills.

We also estimated the net flow of dry rice into the parishes with mills. Acadia Parish received 2,190,000 barrels compared with only 113,000 barrels flowing into Vermilion Parish (Appendix Table 8).

Mills in Acadia Parish require a major share of the green and dry rice available from other parishes. This parish received a total net flow of 4,376,000 barrels of green and dry compared with only 1,604,000 barrels flowing into mills located in Vermilion Parish.

Characteristics of Study Mills

Five study mills purchased about three million barrels of rough rice in 1971 (Appendix Table 9). Twenty-three percent of the rice was long grain type. Four of the five mills procured less than 23 percent long grain rice. Mill F, however, purchased 58 percent long grain rice.

The study mills' purchases of green rice ranged from 8 percent of total rough rice purchases by Mill D to 90 percent by Mill E in 1971. Green rice as a percentage of total rice purchased has generally declined over the 1968-69 to 1970-71 milling seasons (Appendix Table 10).

Green rice producers are generally located within a 20-mile radius of a mill, although working arrangements with outlying driers extend the green rice procurement area. The five mills purchased green rice from an estimated 592 producers in 1970-71 (Appendix Table 11).

Dry rough rice is purchased primarily in Louisiana, although Mill C and Mill D purchase relatively small amounts in Mississippi and Texas. The total rough rice purchases ranged from 515,000 barrels by Mills A, B, and F; 710,000 barrels by D; and around the 850,000-barrel level by C and E in the 1970-71 season.

Key personnel--management, procurement, and sales--ranged from three at Mill F to eight at Mill C (Appendix Table 12). Total dollar compensation for key personnel ranged from \$42,400 at Mill F to \$67,700 at Mill C (Appendix Table 13).

The number of production employees--both full time and seasonal--ranged from 11 at Mill F to 85 at Mill A. Average barrels of rice milled per employee ranged from 7,435 barrels at Mill B to 46,547 barrels at Mill F (Appendix Table 14).

The number of seasonal employees ranged from seven at Mill F to 72 at Mill A. The peak period for hiring seasonal employees occurs early in the milling season to assist in the storage and drying activity (Appendix Table 15).

The six study mills had a combined drier capacity of 46,800 barrels per day; 1,310,000 barrels of rough rice storage; and 200,100 barrels of clean rice storage (Appendix Table 16). Mills D, E, and A had 42, 33, and 18 percent, respectively, of their green rice dried by commercial driers in the 1970-71 season.

Four of the six study mills exported more than 90 percent of their rice (Appendix Table 17). While PL 480 was a predominant market, Mill C and Mill E each sold 50 and 30 percent, respectively, of their rice in dollar markets.

Three of the six mills sold rice in domestic and territory markets. Mill E sold 60 percent of its rice to a cereal manufacturer. Mill F and Mill B sold a small volume of rice to a repackager.

The total number of firms purchasing from the mills ranged from five to 41 with most of the buyers being feed dealers (Appendix Table 18). On the other hand, Mill F handled all bran sales through one broker.

Green rice prices are generally established by one or two of the major Louisiana mills, with Riviana generally considered to be the leader.

The five study mills generally paid higher prices for rice than the average price received by Louisiana farmers. The prices paid by the five mills ranged from \$7.56 a barrel paid by Mill B, to \$8.45 a barrel paid by Mill C (Appendix Table 19).

Prices paid to the study mills for milled rice by a given exporter, everything else being equal, had a plus or minus 5 cents a hundredweight variation in September 1970 and a plus or minus 10 cents a hundredweight variation in January 1971 (Appendix Table 20). Bran prices also had a plus or minus \$5.50 and plus or minus \$9.00 a ton variation during the same time periods for four of the five mills (Appendix Table 21).

The five study mills have annual milling capacity of almost 12 million barrels (Appendix Table 22). They operate on the average at about a 26 percent level of capacity during the milling year. Two of the five mills sold broken rice to several mills for their blending operations.

Rough rice shipments generally moved by farm or commercial trucks to the mills. Mill B, however, received about 30 percent of its dry rice by rail (Appendix Table 23).

In 1971, four of the six mills shipped 95 percent or more of their milled rice by rail. Mill C shipped 64 percent by truck with extensive use of its own truck fleet.

Two of the six mills ship almost two-thirds of their rice in bulk. Mills C and A each ship 10 and 18 percent, respectively, of their rice as packaged (Appendix Table 24).

Financial Condition and Operations

The combined annual net sales of the six study mills ranged from \$35.7 million to \$41.7 million during the three years ending in 1969, 1970, and 1971 (Appendix Tables 25, 26, and 27).

The 1971 book value of five mills' total assets in 1971 amounted to about \$7.1 million financed by \$4.4 million of equity capital, \$2.4 million of current liabilities, and about \$.3 million of term obligations. The five mills' current ratio ranged from 1.39 in 1969 to 1.59 in 1970 and 1.56 in 1971 (Appendix Tables 28, 29, and 30).

The six mills' combined net pretax income ranged from a \$79,000 loss in 1969, a \$195,000 loss in 1970, and a turnaround profit of \$485,000 in 1971 (Appendix Table 25, 26, and 27).

Of interest from a cash flow standpoint are the depreciation charges expensed by the six study mills. These combined charges for the six mills ranged from \$371,000 in 1969 to \$342,000 in 1971 (Appendix Tables 25, 26, and 27).

Interest costs incurred primarily to finance inventories vary widely among the six mills. For example, in 1969 interest costs ranged from \$16,000 for one mill to \$140,000 for another. In 1971, the range was about \$18,000 to \$103,000. Total interest costs incurred by the six mills amounted to about a half million dollars each year (Appendix Tables 25, 26, and 27).

In 1969, three of the study mills incurred operating losses ranging from about \$26,000 to \$180,000; three mills had operating profits ranging from about \$47,000 to \$135,000 (Appendix Table 25).

In 1970 the operating results were worse. Four of the mills experienced operating losses ranging from about \$14,000 to about \$177,000; two of the mills' profits were \$108,000 and about \$147,000 (Appendix Table 26).

In 1971 all of the mills experienced a turnaround and operated in the black with profits ranging from \$12,000 to \$151,000 (Appendix Table 27).

It may be useful to compare the study mills successful 1971 operations by relating their net income to total assets, total equity capital, and net sales. These relationships provide some indication of the returns mill operators get from the resources available to them. These relationships are summarized as follows:

<u>Mill</u>	<u>Ratio of Net Pretax Income to</u>		
	<u>Total Assets</u> <u>Percent</u>	<u>Equity Capital</u> <u>Percent</u>	<u>Net Sales</u> <u>Percent</u>
F	7.2	12.0	1.4
C	NA	NA	.6
B	5.7	12.4	1.2
A	1.2	1.3	.3
D	5.8	15.6	1.3
E	11.0	11.6	2.6

Some insight into a firm's financial progress is provided by the trend of its working capital position. A firm is making financial progress if its working capital position improves over a period of time concurrent with an increase in net worth. We summarize the changes in working capital and net worth during the period from 1969 through 1971 as follows:

<u>Mill</u>	<u>Net Working Capital</u>	<u>Net Worth</u>	<u>Financial</u>
	<u>Increase (Decrease)</u> <u>Dollars</u>	<u>Increase (Decrease)</u>	<u>Progress</u>
F	26,189	228,285	Yes
C	NA	NA	-
B	(82,322)	(42,267)	No
A	(31,857)	(159,444)	No
D	(115,126)	83,400	No
E	159,744	63,870	Yes

Functional Costs

We analyzed the 3-year average unit costs of operating five study mills based on data included in the mills' audit reports supplemented by discussions with the owner-managers. The unit costs were divided into six functional categories: procurement, drying, milling, warehousing and selling, general and administrative, and financing.

Findings confirm that the higher the proportion green rice is of total rough rice milled, the lower unit procurement costs are. For example, on the average, the mill whose green rice comprised about 85 percent of the total barrels milled had an average procurement cost of 5 cents a barrel. At the other extreme, the mill whose green rice comprised only 12 percent of its total milled rice had an average procurement cost of about 30 cents a barrel.

Average cost of drying rice ranged from 15 cents a barrel for one mill to 70 cents a barrel for another.

Cost of milling is closely related to the sheer volume milled. Two high-volume mills--milling around 800,000 barrels annually--had average milling costs of 22 and 27 cents a barrel, respectively. Three mills milling about 536,000 barrels annually had milling costs of 38, 43, and 45 cents a barrel, respectively.

Three-year average unit costs for the five study mills ranged from \$1.25 to \$1.64 a barrel. The range in various costs classified as to function, was:

Procurement	\$.05 to .30 a barrel milled
Drying	.08 to .25 a barrel milled
Milling	.22 to .45 a barrel milled
Warehousing & selling	.36 to .62 a barrel milled
General & administrative	.07 to .25 a barrel milled
Financing	.06 to .21 a barrel milled

After taking into account the 3-year average prices received and the average price paid per barrel milled, four of the five mills experienced deficit net returns ranging from 1 cent to 9 cents a barrel milled.

Potential Benefits Under Central Control

An analysis was made of the projected returns and costs to growers if they were to acquire the mills. Two basic assumptions were made: (1) The five mills would continue to handle the present level of three million barrels; and (2) all milling operations would be handled by two mills.

Cost savings and added revenues resulting from the centralized cooperative milling amounted to \$782,000 or about 16 cents a hundredweight. This increased return would come from (1) Cost reductions because of improved operating efficiencies in drying, storage, transportation, and milling; (2) an increase in total revenues through an improved bargaining position of one seller instead of five.

Interest costs of funds borrowed to acquire the mills (assumed to be \$4.2 million) would amount to around 6 cents a hundredweight. This would reduce the estimated 16 cents saving to about 10 cents a hundredweight.

In addition to initial out-of-pocket equity capital requirements growers also would provide equity investments equivalent to 10 cents a hundredweight in the form of per unit capital retains. The estimated 10 cents a hundredweight savings--after covering interest costs--would be barely adequate to cover a grower's 10 cents per hundredweight capital retain investments. This is not an adequate return to justify the acquisition of the five rice mills.

The next part of this report sets forth the kind of changes that should be made in Louisiana as a basis for and precedent to the acquisition of the five rice mills.

SECTION II

AN INTEGRATED COOPERATIVE MARKETING SYSTEM

We are suggesting a market plan that will require substantial changes in the Louisiana marketing structure. Adoption will require major changes throughout the procurement, conditioning, milling, and selling stages.

First, we are suggesting that the rice cooperative secure 50 percent share of Louisiana rice. Further, we are recommending that this rice be put under contract, graded, pooled, and advances made to the producer. Centralized bid sales would no longer be used by the Rice Co-op's members.

Second, the conditioning structure would be integrated into the overall system. Commercial facilities would dry, store, and move the rice under the direction of the rice cooperative. Cooperative driers would be fully integrated into the system. Handling contracts would be offered to participating proprietary driers for storage and drying services.

Owners of farm driers in the rice cooperative would operate primarily in the same way as the commercial facilities. Rice from these facilities would be handled under the direction of the association. Also, these farms, in some places, could provide drying and storage services to neighboring producers. Third, the mills in the new rice cooperative would be operated at near capacity the year around. This would require the operation of only two of the five mills. Storage and drier facilities would be needed at all mills.

Fourth, the rice cooperative would sell the milled rice on a centralized basis. As sales expertise is gained, more attention could be turned to domestic markets. A subsidiary also could be organized to handle export sales.

Other major changes should be considered. For example, joint sales efforts could be initiated with Texas producers and ultimately with Arkansas producers. A joint sales effort could increase the returns for the three-state producer groups.

The Basic Objective

Rice Cooperative's basic objective would be to improve members' net income. To attain this objective, the cooperative should acquire the five rice mills only if it gets itself in a position to do an effective marketing job. We define an "effective marketing job" as one in which the Rice Cooperative has sufficient volume to take advantage of economies of scale and attain a credible bargaining posture in the marketplace. We define "sufficient volume" as eventual control of 50 percent of Louisiana's rice production from farm to market based on the backstopping commitment of its members to market their rice through the cooperative.

What do we mean by control and commitment?

Control

Implicit in control is the kind of organizational structure that provides management the tools to make and implement decisions about:

1. Most effective use of the mills;
2. Movement of rice from farm to driers to storages, thence to the mills and ultimate market destinations;
3. Allocation of funds and personnel;
4. Selling methods; and
5. Payments to producers.

Commitment

Implicit in commitment by producers is their willingness to:

1. Provide equity capital both initially and through investments of per unit capital retains and patronage refunds;
2. Accept the cooperative's grading, pooling, and commingling methods as a means of rationalizing and making more effective the cooperative's ability to handle growers' rice through the farm-market system; and
3. Provide concrete evidence of their commitment by signing and complying with marketing contracts with the cooperative.

Concept

The Rice Co-op's primary function would be to coordinate the flow of rice from the producer-members through the sales of milled rice and by products. We believe a more rational marketing system would bring about improved marketing efficiencies and greater bargaining power for Louisiana rice producers (Figure 2).

An understanding of rice marketing, particularly in Arkansas and California is quite helpful in visualizing the type of system needed in Louisiana.

Cooperatives in these two states assume full control of rice at all levels. Rice is graded, dried, stored, milled, and marketed by the organization. Each member then receives a series of advances during the milling season.

Acquisition of the five rice mills is a key step in developing such a system in Louisiana. Rice mills are vital to a marketing system in at least two ways. First, it is obvious that all rice must be milled to some degree. Thus, rice mills can be viewed as just another piece of equipment to be acquired jointly by producers. Second, the acquisition of rice mills just for the milling facilities is not particularly attractive. Rather it is the concurrent acquisition of a voice in marketing the finished product that is important to rice growers. This selling function now performed by mills would be part of a cooperative integrated marketing system. That is, the farmer has moved forward the control over his product in its movement to the ultimate consumer.

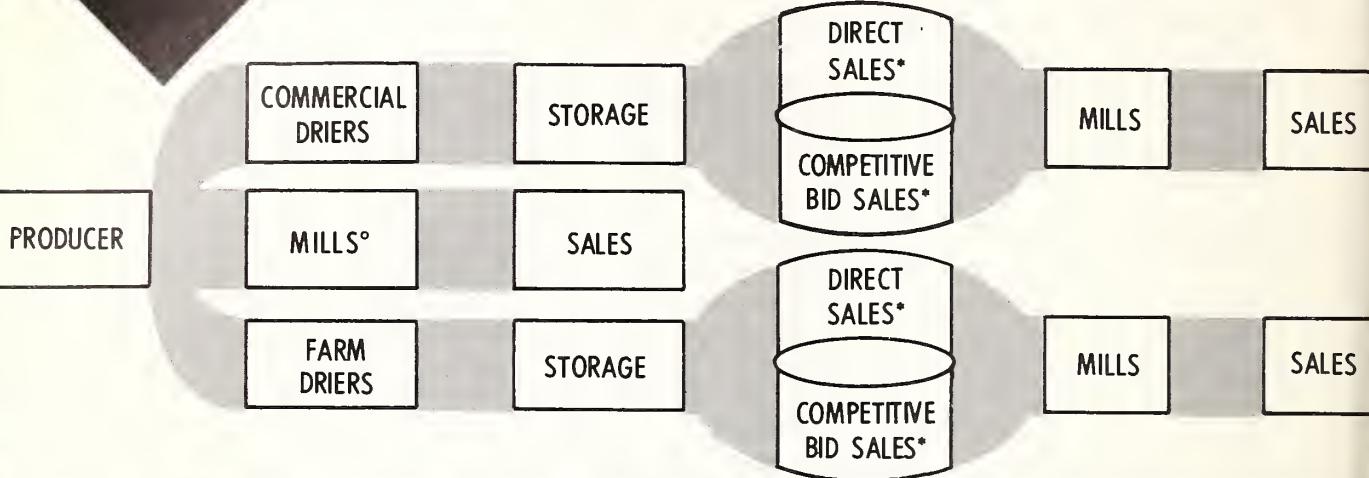
Arkansas and California cooperatives are now marketing direct to both exporters and retailers. Their members realize any benefits of these transactions. Louisiana farmers could also realize these same benefits in an integrated system.

Conceptually we view Louisiana rice producers associating together to finance, control, and operate a rice marketing cooperative. The cooperative would take the complete responsibility for grading, drying, storing, milling, and selling rice in owned, rented, or contracted facilities and distributing the net proceeds to growers under a pooling system after first paying all operating expenses. To make certain that the marketing cooperative would have an assured supply of rice to enable it to make and fulfill sales commitments and to assure adequate financing of its operations, growers would deliver their rice to the cooperative under a marketing agreement that places control of such rice completely in the hands of the cooperative. The association under this concept would operate an integrated rice marketing system.

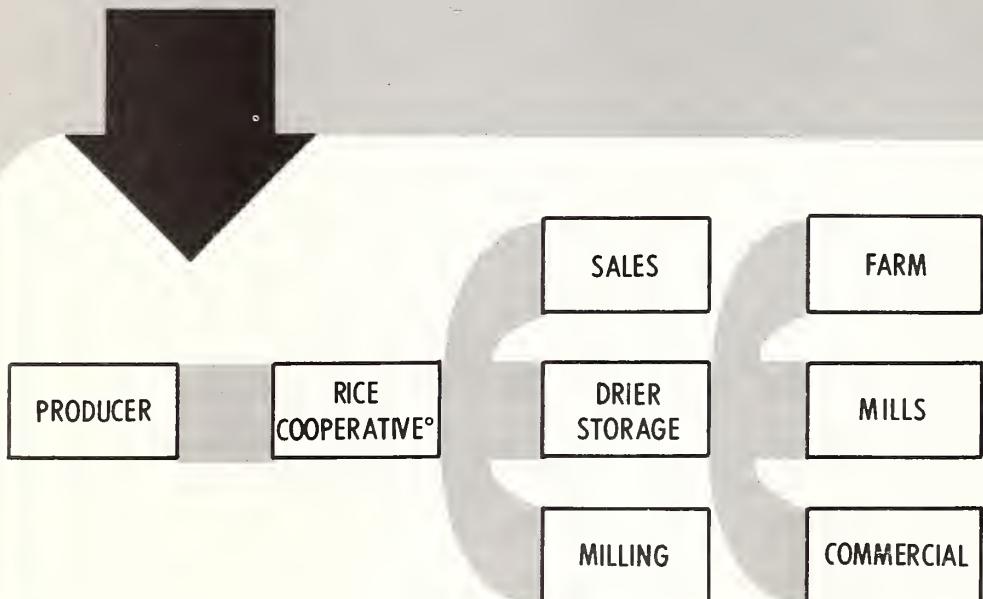
FIGURE 2

PRESENT

rice marketing systems for Louisiana Producers



PROJECTED



*ACCEPT OR REJECT BIDS IN SELLING RICE. °IMMEDIATE PAYMENT.

CONSPPECTUS: A cooperative integrated system would simplify the producer's marketing problem and increase his returns.

For a system to achieve its objectives, what level of the Louisiana rice supply is needed? A recent study concludes that a bargaining approach for an organization would require 50 percent of the total.^{1/} The authors believe this level of control is needed to have any leverage on domestic and dollar export sales.

The 16 Louisiana rice mills generally present a vulnerable and exploitable bargaining base to large exporting firms.^{2/} The mills basically in the export market are largely order takers from the exporters.

In contrast, individual cooperatives in Arkansas and California each market more than 50 percent of the milled rice and by products in their respective states. The exporter here is dealing with a unified and strong marketing posture.

The section of this report bearing the title "Projected Costs and Returns" estimates operating results of a centralized rice marketing cooperative handling a larger volume of rice than the five mills are presently milling. Their present level of milling, three million barrels in 1971, would not assure the economies of scale or the bargaining power needed for the Rice Co-op.

We are therefore suggesting that the Rice Co-op aim for 50 percent of Louisiana's rice production. In 1971, this would have been about 5.7 million barrels.

What does such a system mean to a typical Louisiana rice producer? In 1969, Arkansas producers on the average received 57 cents per hundred-weight more than did Louisiana farmers.^{3/} This price differential includes a 14-cent patronage dividend but excludes storage charges. A Louisiana producer with an average production of over 20 barrels per acre would receive about \$19.00 more per acre for his rice. The average producer with a 123-acre unit in Louisiana would then have received an increased total return of about \$2,350.

Thus, the Rice Co-op must do the following: (1) Control 50 percent or more of Louisiana rice production; (2) assume control of the members' rice at the initial conditioning source; (3) mill the rice at the designated time and place; and (4) market rice on a centralized basis.

1/ Marketing Strategy Alternatives for Texas Rice, Task Force Report, Texas A&M, 1971.

2/ Louisiana rice mills have tried to organize an export sales corporation at least twice during the last 20 years.

3/ A Plan for Marketing Rice in Texas by W. Black and R. Steely, Texas A&M, 1971.

The success of this marketing plan is tied to three basic concepts. First, the producer must agree to support the cooperative both by committing his rice production and by helping finance the association. A marketing contract will be required of all producers.

Second, the Rice Co-op must be able to grade (at initial place of receipt) and commingle into the required lots. This is essential for efficient operations and financing of the Rice Co-op. The rice handling and shipping procedures now being used in Louisiana through American Rice, Inc., on a pilot basis should be used for the Rice Co-op.

Third, the Rice Co-op will need to make arrangements for storage and drying by both farm and commercial organizations. This will require handling contracts. It is essential to tie these storage and drying facilities to the marketing plan.

This marketing plan is based on the existing production-marketing structure in Louisiana. The long-run goal should be to locate mill(s) and driers for optimum efficiency in marketing Louisiana rice.

Organization Structure

We suggest a relatively simple organization structure for a proposed rice marketing cooperative. Some of the essential factors are:

Organize a centralized rice marketing cooperative with growers purchasing stock in the new cooperative in direct proportion to the barrels of rice to be delivered to the cooperative or their acreage commitment.

Rice Co-op buys fixed assets of the five mills at a price of \$ _____ to be paid for in cash, second mortgage notes, and preferred stock of the Rice Co-op. Cash would be obtained from sale of stock to rice producers and others interested in the area rice industry augmented by term loans from the New Orleans Bank for Cooperatives.

Rice Co-op's agreement with its farmer members includes the obligation to receive and handle green basis rice, make advances for the rice under pooling arrangements on a scheduled payment program, market the milled rice and rice by products, and provide technical assistance in production practices. It will provide these services through owned or rented facilities and through contractual arrangements with commercial, including cooperative, driers.

Rice growers agree to appoint Rice Co-op their exclusive agent for conditioning, processing, and marketing rice committed under contract and to accept the recommendations of Rice Co-op on production practices and delivery schedules.

Persons producing rice (both landlords and tenants who control rice production and make production and marketing decisions) are eligible for membership. Every member of Rice Co-op is entitled to one vote.

Rice Co-op issues both common voting stock and non-voting, non-cumulative preferred stock.

Common stock--issued only to members who are producers.

Preferred stock--issued to producers, other investors, and to present stockholder-owners of the study mills.

Rice Co-op would organize and operate to meet the Commodity Credit Corporation's eligibility requirements for a cooperative marketing association to obtain price support for rice.

Rice Co-op--assuming it meets CCC eligibility requirements--may obtain nonrecourse price support loans, using pooled stored rough rice as collateral, the proceeds of which would be used to make loan advances to growers or to pay seasonal loans from bank for cooperatives. Rice Co-op also would have access to New Orleans Bank for Cooperatives for seasonal and term loans.

Rice Co-op would have directors, elected by members of the association. Directors would hire a general manager, who in turn would staff the organization with personnel responsible for production, sales, corporate planning, controller, and the like.

Payments to producers would be on the basis of initial advances tied to support price followed by additional advances as rice is conditioned, milled, and marketed. Rough rice may be released as CCC collateral by obtaining funds from the bank for cooperatives under an ongoing seasonal line of credit. Technicalities of the line of credit could involve a custodianship arrangement to expedite release of collateral.

Estimated Equity Capital Requirements

At an average yield of 23 barrels an acre, we estimate that the total acreage required to be committed to Rice Co-op would be in the neighborhood of 275,000 acres. If the initial equity capital requirements amounted to \$5 million (\$2,400,000 for facilities, \$2,600,000 for working capital) the average capital investment per acre would amount to \$18. At an average of 119 acres per farm in Southwest Louisiana, the average capital investment would approximate \$2,142 per farm. If the initial equity capital requirement were greater or lesser in amount, the average investment per acre would be adjusted accordingly.

CCC Financing Requirements

Section 1425.6 of the U.S. Department of Agriculture's regulations relating to eligibility of cooperative marketing association to obtain price support loans require that the cooperative establish that its operation is on a financially sound basis. This means that its working capital position must be adequate, that it can make advances to members for commodities delivered to it, and that its net worth meet certain standards.

The regulations approach the net worth requirement in several ways. First, it requires that members own net worth in an aggregate amount equivalent to the physical volume handled multiplied by a specified amount per unit of such volume handled. The specified amount for rice is 20 cents per hundredweight. Thus, a cooperative marketing association handling 5.7 million barrels, or 9,234,000 hundredweight would require a net worth of \$1,846,800.

If, however, the association cannot meet this requirement it would be required: (1) To have at least 34 percent (\$627,912 in our example) of the amount so computed and (2) its board of directors would have to agree to "make a capital retain (10 cents per hundredweight in the case of rice)..with respect to each unit of the commodity delivered to the cooperative by producers until such time as the net worth owned by... members is at least equal to the amount provided for above..."

Thus, if a cooperative handling 5.7 million barrels (9,234,000 hundredweight) annually began operations with only \$627,912 net worth, it would have to raise the remaining net worth requirements over the next 2 years through growers investments of 10 cents for each 100 pounds of rice they marketed through the association.

Tax Consequences

In addition to building net worth through investments of growers in per unit capital retain certificates, the association should operate on a cost basis. That is, its organization papers should include provisions clarifying the fact that all net savings from operations belong to producers and would be returned to growers as patronage refunds. By operating on a cooperative basis with respect to CCC eligibility requirements and issuing qualified per unit capital retains and paying patronage refunds that meet the definition set forth in Subchapter T of the 1954 Internal Revenue Code, as amended in 1962 and 1966, the association's patrons must assume the tax consequences of the income they receive from the cooperative.

An essential ingredient in accomplishing this result is for the cooperative to obtain the consent of its rice producer patrons that they will include as current ordinary income the stated amount of the per unit capital retain certificate as well as the non-cash portion of the association's patronage refunds.

The net effect of this new organization is to place control of the movement, processing, storage, and marketing of members' rice with their own cooperative. It will bypass that part of the present marketing system provided by the bid procedures conducted by various sales agencies. It calls for assumption of responsibilities by rice growers to finance, control, operate, and patronize their cooperative. It calls for their acceptance of a series of advances over a period of time for rice delivered to the cooperative rather than an outright sale and purchase arrangement. And it calls for an acceptance of rules and regulations established by the cooperative for sampling, grading, pooling, and commingling their rice. The cooperative's responsibility is to do the best job possible of minimizing costs, maximizing sales proceeds, and returning more to growers than they would have received under the present marketing system.

Projected Costs, Returns, and Distribution to Patrons

Projected amounts available for distribution to producers from 5.7 million barrels of rough rice milled and marketed by this system is estimated at \$49.2 million, or \$8.64 a barrel (Exhibit 1). This projection is based on 1970-71 total revenues and costs summarized as follows:

Milled rice sales	\$ 56,840,000
Hulls, bran and feed	<u>1,837,000</u>
Total revenues	58,687,000
 Less: Costs	
Procurement	\$ 560,000
Drying	3,180,000
Milling	1,425,000
Warehouse & selling	2,850,000
General & administrative	560,000
Financing	<u>855,000</u>
	<u>9,430,000</u>
Amount available for distribution to producers	\$ <u>49,257,000</u>

Rice Co-op may follow several different policies in handling the "amounts available to producers."

Exhibit 1---Projected revenues, costs, yields, and returns from milling 5.7 million barrels of rough rice, 1970-71

CONSPECTUS: Economies of scale and improved bargaining power together can improve returns to farmers for rice marketed on a cooperative basis.

Assumptions:

1. Only two of the five mills' milling facilities would be used to mill 5.7 million barrels of rough dried rice.
2. The drying and storage facilities of all mills would be used to their respective daily capacities. Based on data obtained from the study mills, the five mills would dry 1.2 million barrels over a 30-day period. The remaining 4.5 million barrels would be dried and stored at farm or commercial--including cooperative--driers under contracts with Rice Co-op for such services.

Projected revenues, yields, and estimated net income as follows:

Hulls	1,846,800 cwt. @ 10¢	\$ 184,680
Head rice	5,078,700 cwt. plus 20% of 923,400 cwt. of large second heads and screenings or 184,680 cwt. = 5,263,380 cwt. @ \$9.75	51,317,955
Remaining large second heads and screenings-- 80% of 923,400 cwt. = 738,720 cwt. plus brewers rice, 461,700 cwt. = 1,200,420 cwt. @ \$4.60		5,521,932
Bran	646,380 cwt. Sold as livestock feed @ \$36 a ton, or 46,170 tons	
Polish	@ \$36	<u>1,662,120</u>
Total revenues		\$58,686,687
Less: Projected Costs		
Procurement	5.7 million barrels @ 10¢ a barrel	\$ 560,000
Drying	1.2 million barrels @ 40¢ a barrel	480,000
Milling	5.7 million barrels @ 25¢ a barrel	1,425,000
Warehouse and selling	5.7 million barrels @ 50¢ a barrel	2,850,000
General and administrative	@ 10¢ a barrel	560,000
Financing	@ 15¢ a barrel	<u>855,000</u>
Total		\$ 6,730,000
Add: Outside drying costs 4.5 million barrels @ 60¢ a barrel		<u>\$ 2,700,000</u>
Total		\$ 9,430,000
Amount available for distribution to producers		<u>\$49,256,687</u>

Residual Concept

Under this method of distributing net proceeds, all amounts left over after paying all expenses--including depreciation and interest--are paid to producers. The form of the payment is part in cash and part in per unit capital retain certificates that represent the investment of growers in the capital structure of the cooperative. At 10 cents per hundredweight of rice marketed through the association (according to ASCS eligibility requirements) the per unit capital retain would amount to \$923,400 and the remaining portion available for distribution would amount to \$49,256,687 minus \$923,400, or \$48,333,287. On the basis of 5.7 million barrels marketed, the distribution would be as follows:

	<u>Returns per Barrel</u>	
	<u>Dry Basis</u>	<u>Green Basis</u>
Cash	\$ 8.48	\$ 7.46
Non-cash	<u>.16</u>	<u>.14</u>
Total	\$ 8.64	\$ 7.60

Under this procedure, Rice Co-op would operate at zero net margins. It would rely on the per unit capital retains and depreciation charges retained as the primary source of funds to repay term loans from the bank for cooperatives and other secondary sources of debt capital.

Competitive Price Concept

The method of distributing net proceeds is based on a constraint placed on total amounts paid to producers for rice delivered to the cooperative. This constraint would limit payments to producers to "the competitive price" whatever that price may be. It could result from a decision by the board of directors to avoid adverse competitive reaction with the resulting stresses and strains on membership relations where members marketing green rice through Rice Co-op end up with different payments than producers marketing green rice to other mills.

Under this alternative, if payments to producers amounted to \$6.65 per barrel of green rice delivered, the total amount paid to producers would amount to 6,477,273 barrels (green basis) at \$6.65, or \$43,025,675, of which 10 cents per hundredweight (dry basis), or \$923,400, would be in the form of per unit capital retains, and the remainder, or \$42,102,275, would be in the form of cash. Restated on a per barrel of green rice delivered basis, the payments to producers would be as follows:

Cash	\$ 6.51
Non-cash	<u>.14</u>
Total	\$ 6.65

After taking into account total payments to producers of \$43,025,675, the net margins of Rice Co-op would be computed as follows:

Amount available for distribution to producers	\$ 49,256,687
Less: Payments to producers in form of--	
Cash	\$ 42,102,275
Non-cash	<u>923,400</u>
	<u>43,025,675</u>
Net savings	\$ 6,231,012

We assume the net savings would be paid as patronage refunds of which 20 percent would be in cash, and 80 percent represented by a form of equity. Such a distribution in absolute dollars as well as on the green rice delivered basis is summarized as follows:

Cash	20% of \$6,231,012, or \$1,246,202, or 19¢ per barrel, green basis
Non-cash	80% of \$6,231,012, or \$4,984,810, or 76¢ per barrel, green basis

To recap, under the example illustrated, a grower would receive--and invest--the following amounts per barrel of green rice marketed through Rice Co-op:

	<u>Payment</u>	<u>Patronage Refund</u>	<u>Total</u>
Cash	\$ 6.51	\$.19	\$ 6.70
Investment	<u>.14</u>	<u>.77</u>	<u>.91</u>
Total	\$ 6.65	\$.96	\$ 7.61

The amounts invested by growers in the form of per unit capital retains and non-cash patronage refunds provide a total addition to net worth of \$5,908,210. From a cash flow standpoint, this amount, plus depreciation, would be more than adequate to repay term obligations.

Estimated Rice Volume and Members Required

We have projected a 5.7 million barrel volume for the new Rice Co-op (Appendix Table 31).^{4/} We have further recommended that producer marketing contracts be used to secure this volume. This puts us at the stage where we are talking about signing up producers. Thus, estimates of where the producers and the volume are located will be needed before any educational program is launched. This sort of detail will be discussed in this section.

Source of Rice

About 1.1 million of the 5.7 million barrels would come from the green rice producers now selling rice to mills (Table 1). This volume of green rice also includes green rice produced on land controlled by the mills. Two of the study mills fit into this category.

Table 1.--Total rice volume projected for Rice Co-op by conditioning outlet ^{1/}

CONSPECTUS: The volume of rice needed to implement the rice marketing plan.

Parish	: Study mills	: Co-op driers	: Farm driers	: Proprietary driers 2/	: Total
<u>1,000 Barrels</u>					
Acadia	259.4	112.3	118.0	257.9	747.6
Allen	-	161.7	-	75.8	237.5
Beauregard	-	35.7	184.0	15.2	234.9
Calcasieu	30.0	156.2	-	212.4	398.6
Cameron	-	10.9	405.0	30.3	446.2
Evangeline	-	126.1	559.0	136.5	821.6
Jefferson					
Davis	44.2	323.4	-	288.2	655.8
Lafayette	-	8.2	-	30.3	38.5
St. Landry	-	145.3	100.0	60.7	306.0
Vermilion	756.2	202.8	391.0	364.0	1,714.0
Other	-	60.3	-	45.5	105.8
Total	1,089.2	1,342.9	1,757.0	1,516.8	5,706.5

^{1/} The rice volume is based on 1971 data.

^{2/} The volume of rice projected for each parish is based on percentages weighted according to the ratio of parish production to the total production in the area.

^{4/} The competitive behavior of other mills subsequent to the formation of the Rice Co-op is not treated in this report. However, we would expect both the price level and the volume of rough rice purchased by other mills to change with the presence of the new association.

The 1.1 million barrels of green rice from the five mills represents part of the assets the rice cooperative is acquiring. The new association would continue to acquire this volume because of the relationship built up over the years between the study mills and the producers.

The remaining volume, 4.7 million barrels, would be secured from producers that use both commercial and farm drier facilities. We have estimated that the rice cooperative would secure 50 percent of the total rice dried on farms. Thus, farm driers are estimated to furnish 1.3 million barrels.

The rice cooperative would secure about 3.3 million barrels from patrons of cooperative and proprietary driers. Cooperative driers are projected to furnish 1.8 million barrels. The remaining volume of 1.5 million barrels would come from proprietary driers.

Any slippage of these specific volumes of rice would require adjustments in the other sources. This would be true not only of changes from estimates in the volumes by condition of rice but also by the origin of the rice.

Rice producers with farm driers and producers with rice dried by proprietary driers are generally located in all parishes. However, the green rice producers associated with the five mills and the cooperative driers are located only in certain parishes.

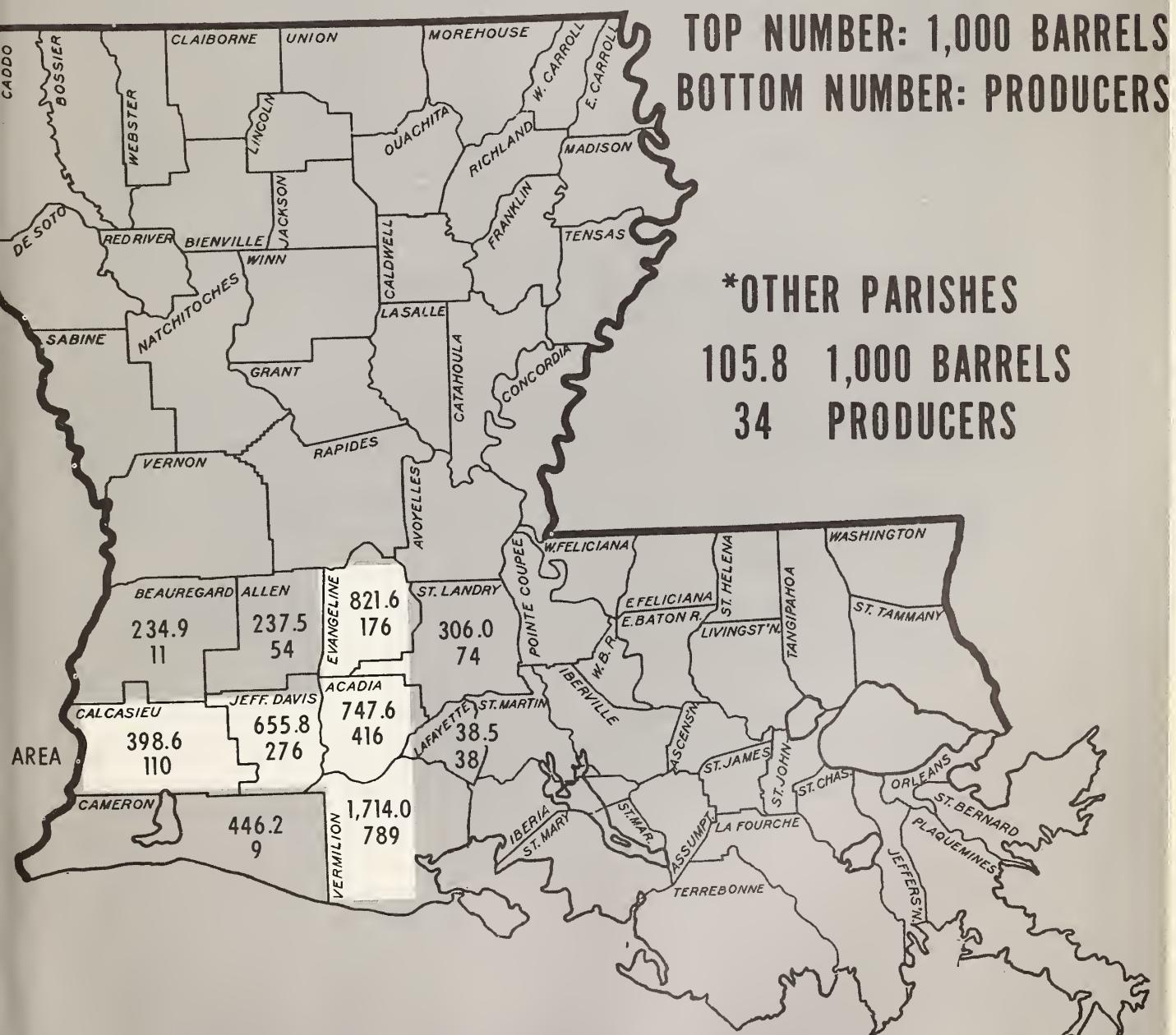
The volume of rice projected from specific conditioning outlets by parish similar to overall parish volume is concentrated in the "T" area (Figure 3). Vermilion has .7 million barrels of rice from the study mill's green rice producers and .4 million barrels from the patrons of proprietary mills. Evangeline has .6 million barrels of rice from cooperative driers. Finally, Jefferson Davis has .3 million barrels from the producers with farm driers.

Source of Members

A total of 2,000 producers is projected for the Rice Co-op. The rice producers also are concentrated in the "T" area. Acadia and Vermilion are estimated to have 416 and 789 producers, respectively. These two parishes would provide more than half the total producers projected for the rice cooperative (Table 2).

FIGURE 3

PROJECTED VOLUME AND NUMBER OF PRODUCERS FOR THE RICE CO-OP BY SELECTED PARISHES



*RAPIDES, AVOYELLES, POINTE COUPEE, ST. MARTIN, IBERIA, AND ST. MARY

Table 2.--Rice producers projected for Rice Co-op by conditioning outlet 1/

CONSPECTUS: The number of producer-members needed to implement the rice marketing plan.

Parish	Study : mills	Cooperative : driers 2/	Farm : driers	Proprietary : driers 2/ 3/	Total producers
	<u>Number</u>				
Acadia	129	27	21	239	416
Allen	-	-	29	25	54
Beauregard	-	-	7	4	11
Calcasieu	6	33	28	43	110
Cameron	-	-	2	7	9
Evangeline	-	83	23	70	176
Jefferson					
Davis	16	115	59	86	276
Layafette	-	-	2	36	38
St. Landry	-	30	26	18	74
Vermilion	440	105	37	207	789
Other	-	-	11	23	34
Total	591	393	245	758	1,987

1/ The number of producers is based on 1971 data.

2/ Patrons of conditioning outlets.

3/ Appendix Table 3.

We also have projected the number of producers for the initial conditioning outlet by parish. The largest group of producers, 758, would come from those producers now having their rice dried by commercial facilities.

The second largest group of producers, 591, would consist of those producers now selling green rice to the five mills. These producers are largely concentrated in Vermilion parish.

The two remaining groups of producers would come from cooperative driers and farm driers. Cooperative driers would furnish 393 producers as compared to 245 producers from the farm drier group.

Figure 3 summarizes the membership and volumes of rice required for the Rice Co-op. For this organization to realize its potential, these specific numbers of producers and volumes of rice will be needed. The "T" area could provide 75 percent of the rice and 89 percent of the producers.

APPENDIX

Appendix Table 1.--Volume and percent of rice production by parish,
1971

CONSPECTUS: Four parishes--Acadia, Calcasieu, Jefferson Davis,
and Vermilion--are key production areas.

Parish	:	Production	:	Percent
<u>1,000 Barrels</u>				
Acadia		1,990.5		17
Allen		559.9		5
Beauregard		121.3		1
Calcasieu		1,633.3		14
Cameron		277.6		2
Evangeline		1,006.4		9
Jefferson Davis		2,218.1		19
Lafayette		230.8		2
St. Landry		449.7		4
Vermilion		2,748.3		24
Others		345.3		<u>3</u>
Total		11,581.2		100

Appendix Table 2.--Number of farm allotments, tenants per allotment, and total number of rice producers by parish, 1971

CONSPECTUS: There are twice as many rice producers as allotments because of multiple tenants for many allotments.

Parish	: Number of farm : : allotments : : allotments	Tenants per : allotment 1/ : allotment 1/	Total rice producers
Acadia	1,183	2.0	2,366
Allen	144	2.0	288
Beauregard	25	1.5	38
Calcasieu	227	1.5	341
Cameron	45	1.5	68
Evangeline	562	2.0	1,124
Jefferson Davis	627	1.5	941
Lafayette	148	2.0	296
St. Landry	205	2.0	410
Vermilion	<u>1,445</u>	<u>1.5</u>	<u>2,168</u>
Total	4,611		8,040

1/ Number of tenants per allotment is based on a conference with
Mr. J. R. Bath, ASCS, Alexandria, La.

Appendix Table 3.-Volume of green and dry rice received by initial conditioning outlets and number of producers by rice driers and mills for selected parishes, 1971 1/

CONSPETUS: Rice marketing is about equally distributed between green and dry rice.

Parish	Condition outlet										Driers (dry)			Overall total		
	Mills (green)			Farm			Proprietary/			Cooperative/			Total dry			
	Study	Volume : producers	Other	Total	Volume : producers	Number	Volume : Producers	Number	Volume : Producers	Number	Volume : Producers	Number	Volume : Producers	Number	Volume : Producers	Number
	1,000	Barrels	1,000	Barrels	1,000	Barrels	1,000	Barrels	1,000	Barrels	1,000	Barrels	1,000	Barrels	1,000	Barrels
Acadia	259.4	129	818.1	972	1,077.5	1,101	224.7	41	570.3	678	118.0	27	913.0	746	1,990.5	1,847
Allen	-	-	236.5	122	236.5	122	323.4	59	-	-	-	-	323.4	59	559.9	181
Beauregard	-	-	50.0	16	50.0	16	71.3	13	-	-	-	-	71.3	13	121.3	29
Cicisieu	30.0	6	855.2	179	885.2	185	312.4	57	251.7	53	184.0	33	748.1	143	1,633.3	328
Cameron	-	-	255.7	63	255.7	63	21.9	4	-	-	-	-	21.9	4	277.6	67
Evangeline	-	-	349.3	390	349.3	390	252.1	46	-	-	405.0	83	657.1	129	1,006.4	519
Jefferson	44.2	16	968.1	411	1,012.3	427	646.8	118	-	-	559.0	115	1,203.8	233	2,218.1	660
Davis	-	-	214.3	275	214.3	275	16.5	3	-	-	-	-	16.5	3	230.8	278
Lafayette	-	-	59.2	54	59.2	54	290.5	53	-	-	100.0	30	390.5	83	449.7	137
St. Landry	756.2	440	735.1	580	1,491.3	1,020	405.6	74	460.4	363	391.0	105	1,257.0	542	2,748.3	1,562
Vermilion	-	-	224.7	156	224.7	156	120.6	22	-	-	-	-	120.6	22	345.3	178
Other ^{5/}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1,089.8	591	4,766.2	3,218	5,856.0	3,809	2,685.8	490	1,282.4	1,094	1,757.0	393	5,725.2	1,977	11,581.2	5,786

1/ Distribution of rice is based on production, storage, and milling data by parish.

2/ Number of producers is based on total producers and rice production by parish.

3/ Based on 50 percent of storage capacity.

4/ Volume shown does not include green rice handled/market to mills.

5/ Average unit marketed is the overall average unit size of the 10 parishes.

6/ Includes: Iberia, St. Mary, St. Martin, Pointe Coupee, Avoyelles, and Rapides parishes.

Appendix Table 4.--Estimated rice storage volume by type of organization in selected parishes, 1971

CONSPPECTUS: All types of storage organizations used by producers should be taken into account in the development of any new marketing system in Louisiana.

Parish	Type of organization					
	Co-op ^{1/}	Proprietary			Farm ^{4/}	Mill
		1/	2/	3/		
<u>1,000 Barrels</u>						
Acadia	165.0	2,232.6		449.4	2,959.0	5,806.0
Allen	-	92.0		646.8	-	738.8
Beauregard	-	-		87.7	-	87.7
Calcasieu	199.9	956.1		624.8	969.6	2,750.4
Cameron	-	-		43.8	-	43.8
Evangeline	449.0	540.0		504.2	127.8	1,621.0
Jefferson Davis	775.8	1,900.7		1,293.5	-	3,970.0
Lafayette	-	-		32.9	-	32.9
St. Landry	140.0	528.0		581.0	-	1,249.0
Vermilion	390.4	813.8		811.2	1,541.5	3,556.9
Other ^{5/}	-	-		241.2	33.8	275.0
Total	2,120.1	7,063.2		5,316.5	5,631.7	20,131.5

1/ Louisiana State Warehouse Commission, February 1972.

2/ Average storage capacity used where actual data were not available.

3/ Includes driers owned by one mill not located at site.

4/ Based on Traylor, et al, study on available rice storage. Farm driers were estimated to have 10,962 barrels. Also, Farm Rice Driers in Louisiana, 1971 Directory.

5/ See Appendix Table 3 for specific parishes.

Appendix Table 5.--Number of farm, cooperative, proprietary, and mill driers by parish, 1971

CONSPECTUS: Individual farm driers comprise 85 percent of all storage firms.

Parish	Type						
	Cooperative		Proprietary				
	Farm	Inde-	Mill	Inde-	Mill	Total	
	ARGA	pendent	owned ^{1/}	pendent	Mill		
<u>Number</u>							
Acadia	41	-	1	3	15	8	68
Allen	59	-	-	-	1	-	60
Beauregard	13	-	-	-	-	-	13
Calcasieu	57	-	1	1	6	2	67
Cameron	4	-	-	-	-	-	4
Evangeline	46	2	-	-	3	1	52
Jefferson Davis	118	4	-	1	15	-	138
Lafayette	3	-	-	-	-	-	3
St. Landry	53	-	1	-	-	-	54
Vermilion	74	1	2	2	6	4	89
Other	<u>22</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>22</u>
Total	490	7	5	7	46	15	570

1/ Driers owned by one mill not located at mill site.

2/ See Appendix Table 3 for specific parishes.

SOURCE: Farm Rice Driers in La., 1971 Directory; Louisiana State Warehouse Commission, February 1972; data obtained from ARGA; and unpublished information from Dr. Traylor, Louisiana State University.

Appendix Table 6.--Estimated barrels of rice milled and percent of total volume by parish, 1971

CONSPECTUS: Louisiana rice is milled by 16 firms. Three of these firms each milled over 1 million barrels in 1971.

Mill by parish	Estimated milling volume 1/	Percent of total milling volume
	<u>1,000 Barrels</u>	<u>Percent</u>
Acadia:		
Broussard	826.3	7.2
Estherwood	611.9	5.4
Dore	739.9	6.5
Supreme	871.4	7.6
MFC	712.8	6.3
Eagle	128.0	1.1
South Coast	369.5	3.2
Edmundson-Duhe	<u>1,849.8</u>	<u>16.2</u>
Sub-total	6,109.6	53.5
Vermilion:		
Liberty	520.4	4.6
Kaplan	521.3	4.6
Riviana	<u>1,593.8</u>	<u>14.0</u>
Republic	<u>512.0</u>	<u>4.4</u>
Sub-total	3,147.5	27.6
Evangeline:		
Mamou	242.0	2.1
Calcasieu:		
Farmers	1,479.8	13.0
American	<u>370.0</u>	<u>3.2</u>
Sub-total	1,849.8	16.2
Iberia:		
Conrad	<u>64.0</u>	<u>0.6</u>
Total	11,412.9 ^{2/}	100.0

1/ Milling data based on individual miller estimates, Investor's Reader, No. 3 Vol. 59, Aug. 1972, and actual data on 6 mills. The first two categories were then revised to accommodate the total milling volume of 11,412.9 thousand barrels.

2/ All Louisiana production excluding N.E. Louisiana parishes and assuming zero net flow between other States and Louisiana. A rice stock of 167.8 thousand barrels is deducted from total production. See Rice Millers Assoc., Aug. 1971, Statistical Statement, P. 3.

Appendix Table 7.--Estimated green rice volume purchased by individual mills by parish, 1971

CONSPECTUS: Rice mills purchase one-half of Louisiana rice on a green basis at harvest time.

Mill by parish	Green rice : purchases ^{1/}	Percent of total green rice procurement
	<u>1,000 Barrels</u>	<u>Percent</u>
Acadia:		
Broussard	185.0	3
Estherwood	327.2	6
Dore	395.5	7
Supreme	784.2	13
MFC	59.9	1
Eagle	68.4	1
South Coast	197.5	3
Edmundson-Duhe	<u>988.9</u>	<u>17</u>
Sub-total	3,006.6	51
Vermilion:		
Liberty	399.0	7
Kaplan	257.2	4
Riviana	852.0	15
Republic	<u>188.7</u>	<u>3</u>
Sub-total	1,696.9	29
Evangeline:		
Mamou	129.4	2
Calcasieu:		
Farmers	791.1	14
American	<u>197.8</u>	<u>3</u>
Sub-total	988.9	17
Iberia:		
Conrad	<u>34.2</u>	<u>1</u>
Total	5,856.0	100

^{1/} Green rice purchases based on operations of 6 mills. These purchases are assumed at the 81 percent level of total storage capacity for other mills.

Appendix Table 8.--Milling requirements and net flow of green and dry rice to parishes with mills, 1971

CONSPECTUS: Fifty percent or more of the green rice required by the mills in the 3 important rice producing parishes originated outside the individual parish in 1971.

Parish	Milling requirements	Available rice		Net flow to parish
		by condition	in parish	
		<u>1,000 Barrels</u>		
Acadia:				
Green	3,006.6	820.4	2,186.2	
Dry	<u>3,103.0</u>	<u>913.0</u>	<u>2,190.0</u>	
Total	6,109.6	1,733.4	4,376.2	
Calcasieu:				
Green	988.9	335.4	653.5	
Dry	<u>860.9</u>	<u>748.1</u>	<u>112.8</u>	
Total	1,849.8	1,083.5	766.3	
Vermilion:				
Green	1,696.9	827.0	869.9	
Dry	<u>1,450.6</u>	<u>1,257.0</u>	<u>193.6</u>	
Total	3,147.5	2,084.0	1,063.5	
Other ^{1/} :				
Green	163.6	163.6	-	
Dry	<u>142.4</u>	<u>724.9</u>	<u>(582.5)</u>	
Total	<u>306.0</u>	<u>888.5</u>	<u>(582.5)</u>	
Total	11,412.9	5,789.4	5,623.5	

1/ Evangeline and Iberia.

NOTE: () Indicates surplus rice available for movement to the other 3 parishes with mills.

Appendix Table 9.--Volume and percentage of rough rice by grain type purchased for the 5 mills, 1968-71

CONSPECTUS: Only 1 of the 5 study mills purchased more long grain rice than medium grain rice.

Mill by length of rice	Milling year					
	1968-69		1969-70		1970-71	
	Volume	Percent	Volume	Percent	Volume	Percent
	1,000		1,000		1,000	
	<u>Barrels</u>		<u>Barrels</u>		<u>Barrels</u>	
Mill D:						
Medium	450.9	61	633.3	68	556.2	80
Long	<u>284.9</u>	<u>39</u>	<u>297.8</u>	<u>32</u>	<u>138.7</u>	<u>20</u>
Total	<u>735.3</u>	<u>100</u>	<u>931.1</u>	<u>100</u>	<u>694.9</u>	<u>100</u>
Mill B:						
Medium	452.1	73	377.1	77	507.6	97
Long	<u>161.4</u>	<u>27</u>	<u>111.1</u>	<u>23</u>	<u>12.8</u>	<u>3</u>
Total	<u>613.5</u>	<u>100</u>	<u>488.2</u>	<u>100</u>	<u>520.4</u>	<u>100</u>
Mill A:						
Medium	563.3	87	477.7	94	506.8	97
Long	<u>79.5</u>	<u>13</u>	<u>28.9</u>	<u>6</u>	<u>14.5</u>	<u>3</u>
Total	<u>642.8</u>	<u>100</u>	<u>506.6</u>	<u>100</u>	<u>521.3</u>	<u>100</u>
Mill C:						
Medium	358.8	54	313.0	58	340.0	42
Long	<u>305.1</u>	<u>46</u>	<u>220.1</u>	<u>42</u>	<u>486.3</u>	<u>58</u>
Total	<u>663.9</u>	<u>100</u>	<u>533.1</u>	<u>100</u>	<u>826.3</u>	<u>100</u>
Mill F:						
Medium	448.9	87	333.4	71	445.4	82
Long	<u>98.5</u>	<u>13</u>	<u>136.1</u>	<u>29</u>	<u>66.6</u>	<u>18</u>
Total	<u>547.4</u>	<u>100</u>	<u>469.5</u>	<u>100</u>	<u>512.0</u>	<u>100</u>
Total:						
Medium	2,274.0	71	2,134.5	73	2,356.0	77
Long	<u>929.4</u>	<u>29</u>	<u>794.0</u>	<u>27</u>	<u>718.9</u>	<u>23</u>
Total	<u>3,203.4</u>	<u>100</u>	<u>2,928.5</u>	<u>100</u>	<u>3,074.9</u>	<u>100</u>

Appendix Table 10.--Volume and percentage of rough rice purchased by type of condition for the 6 rice mills 1/, 1968-70 milling seasons

CONSPPECTUS: The integration of the drier and storage function into overall mill operations has permitted mills to bear increased price risk by purchasing green rice.

Mill/condition of rice	Year					
	1968-69		1969-70		1970-71	
	Volume	Percent	Volume	Percent	Volume	Percent
	Barrels		Barrels		Barrels	
Mill D 2/ 3/:						
Green	136,249	3/	18	54,380	8	59,878
Dry	<u>620,059</u>	<u>82</u>	<u>629,829</u>	<u>92</u>	<u>652,877</u>	<u>92</u>
Total	756,308	100	684,209	100	712,755	100
Mill A 2/:						
Green	584,213	91	441,486	87	398,951	77
Dry	<u>58,590</u>	<u>9</u>	<u>65,161</u>	<u>13</u>	<u>122,361</u>	<u>23</u>
Total	642,803	100	506,647	100	521,312	100
Mill F 4/:						
Green	295,940	54	188,819	40	188,733	37
Dry	<u>251,439</u>	<u>46</u>	<u>280,722</u>	<u>60</u>	<u>323,286</u>	<u>63</u>
Total	547,379	100	469,541	100	512,019	100
Mill B 2/:						
Green	357,002	58	296,641	61	257,160	49
Dry 5/	<u>256,455</u>	<u>42</u>	<u>191,528</u>	<u>39</u>	<u>263,277</u>	<u>51</u>
Total	613,457	100	488,169	100	520,437	100
Mill C:						
Green	224,749	25	185,658	22	185,013	22
Dry	<u>838,111</u>	<u>75</u>	<u>555,165</u>	<u>78</u>	<u>641,311</u>	<u>78</u>
Total	1,062,860	100	740,823	100	826,324	100
Mill E:						
Green	726,530	6/	90	742,090	6/	784,237
Dry	<u>80,725</u>	<u>10</u>	<u>82,454</u>	<u>10</u>	<u>87,137</u>	<u>10</u>
Total	807,255	100	824,544	100	871,374	100

1/ Green rice volume is given in dry rice equivalent.

2/ Based on data developed by mill personnel.

3/ Includes green rice purchased in July.

4/ Based on audit report.

5/ Does not include seed rice.

6/ Estimated.

Appendix Table 11.--Estimated number of green rice producers by volume per mill and average number of barrels per producer for the 5 mills, 1968-70

CONSPECTUS: Two of the 5 study mills had 69 percent of the rice producers who sold green rice direct to mills in 1971.

Mill/year	Producers	Volume of green rice	Average lot size
	<u>Number</u>	<u>Barrels</u>	
Mill G 1/:			
1968-69	62	179,799	2,900
1969-70	56	148,526	2,652
1970-71	55	148,010	2,691
Mill D:			
1968-69	67	136,249	2,034
1969-70	57	54,380	954
1970-71	46	59,878	1,302
Mill A 2/:			
1968-69	295	584,213	1,980
1969-70	270	441,486	1,635
1970-71	235	398,951	1,698
Mill B 3/:			
1968-69	229	357,002	1,559
1969-70	192	296,641	1,545
1970-71	172	257,160	2,057
Mill F 1/ 3/:			
1968-69	120	177,564	1,480
1969-70	94	113,291	1,205
1970-71	84	113,239	1,348
Total			
1968-69	773	1,434,827	1,856
1969-70	669	1,054,324	1,576
1970-71	592	977,238	1,651

1/ Excludes rice production from land controlled by mills.

2/ Estimated from data with adjustments for different deliveries in same season.

3/ Volume of green rice based on estimates by mill personnel.

Appendix Table 12.--Number of key personnel by function for the 6 rice mills, 1970-71

CONSPECTUS: Three of the 6 study mills required one-half or less key personnel as compared to the other 3 mills.

Mill	Management			Procure- ment	Sales	Total
	Overall ^{1/}	Mill	Office			
	<u>Number</u>					
A	1.5	.5	-	-	1.0	4.0
F	1.0	-	-	-	1.0	3.0
B	2.0	-	.5	-	.2/	3.0 ^{3/}
C	2.0	1.0	2.0	2.0	.4/	8.0
D	1.5	3.0	-	-	1.0	6.0
E	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>—</u>	<u>1.0</u>	<u>6.0</u>
Total	9.0	5.5	3.5	2.0	4.0	30.0

1/ All rice firm officers were included or prorated depending on other responsibilities.

2/ Performed by non-key personnel.

3/ One individual classified as a purchasing agent was not included.

4/ Commission buyer.

Appendix Table 13.--Total dollar compensation for key personnel by function for the 5 mills, 1970-71

CONSPECTUS: Mill C paid almost one-third more total compensation to key personnel than did the other study mills.

Mill	Management	Sales	Procurement	Total
<u>Dollars</u>				
A	25,400	9,600	8,600	43,600
F	23,000	10,800	8,600	42,400
B	38,900	6,500	1/	45,400
C	57,700 ^{2/}	10,000	3/	67,700
D	<u>33,360</u>	<u>6,900</u>	<u>8,196</u>	<u>48,456</u>
Total	178,360	43,800	25,396	247,556

1/ Non-key personnel perform this function.

2/ Additional management compensation ranges from \$1,000 to \$5,000.

3/ Non-salaried buyer.

Appendix Table 14.--Average volume of rice milled by production employees for the 6 mills, 1970-71

CONSPECTUS: Mill F milled over four times the average barrels milled per production employee for all mills.

Mill	Production employees 1/	Barrels milled	Average barrels milled per production employee
<u>Number</u>			
A	85	521,312	6,133
F	11	512,019	46,547
B	70	520,437	7,435
C	34	826,323	24,304
D	67	629,262	9,392
E	<u>67</u>	<u>871,374</u>	<u>13,006</u>
Total	334	3,880,727	11,619

Appendix Table 15.--Number of regular and seasonal employees by functional activities for 6 mills, 1970-71

CONSPECTUS: Seasonal employees are used by all the mills. They are particularly important to 2 of the study mills in carrying out certain functional activities.

Mill	Milling			Drying-storage			Receiving-shipping			Total			Other ^{1/}			Overall total		
	Regular	Seasonal		Regular	Seasonal		Regular	Seasonal		Regular	Seasonal		Regular	Seasonal		Regular	Seasonal	
	Number																	
A	5	14	6	20	2	38	13	72	1	-	-	-	-	-	-	86		
F	1	-	2	7	1	-	4	7	3	-	-	-	-	-	-	14		
B	2	14	4	36	2	12	8	62	11	2	-	-	-	-	-	83		
C	12	7	7	6	2	-	21	13	12	-	-	-	-	-	-	46		
D	9	6	5	3	6	4	20	13	12	9	-	-	-	-	-	34		
E	15	4	30	6	6	51	16	15	15	-	-	-	-	-	-	82		
Total	44	45	54	78	19	60	117	183	54	11	-	-	-	-	-	365		

^{1/} Includes office employees, night watchmen, engineers, and truck drivers.

Appendix Table 16.--Drier and storage capacity for study mills,
1970-71

CONSPECTUS: There is a relatively wide variation in the drier capacity as well as rough and clean rice storage capacity among the 6 study mills.

Mill	: Drier capacity 1/	Storage	
		Rough	Clean
	<u>Barrels per day</u>	<u>Barrels</u>	<u>Cwt.</u>
D	1,250	150,000	50,000
F	4,550	165,000	-
A	10,000	350,000	55,000
B	15,000	600,000	200,000 <u>2/</u>
C	11,000	356,000	10,100
E	<u>5,000</u>	<u>500,000</u>	<u>65,000</u>
Total	46,800	2,121,000	380,100

1/ Estimated daily output during receiving period.

2/ Additional 10,000 cwt. for operating bins.

3/ Rough rice storage at 6 locations.

Appendix Table 17.--Types of sales outlets for clean rice by mill,
1971

CONSPECTUS: Although the PL 480 program takes most of the mills' rice, dollar exports and domestic sales are particularly important for mills' D and E.

Mill	Export			Domestic	Total
	Dollar <u>1/</u>	PL 480	Brown : Milled		
	<u>Percent</u>				
C	50 <u>2/</u>	17	23	10	100
F	14	37	41	8	100
A	7	26	42	25 <u>3/</u>	100
B	2	15	77	6	100
D	9	36	55	- <u>4/</u>	100
E	30	3	7	60 <u>5/</u>	100

1/ Long grain rice.

2/ Five percent was sold as packaged rice.

3/ Nineteen percent of domestic sales were territory shipments (Puerto Rico).

4/ Broken rice blended with export sales or mixed with by-product sales.

5/ Medium grain rice sold to a cereal manufacturer.

Appendix Table 18.--Type of rice purchasing firm by mill, 1970-71

CONSPECTUS: Except for feed mills that handle their by-products, rice mills really deal with a relatively small number of purchasing firms.

Type of firm <u>1/</u> :	Mill				
	C	B	A	F	D
	<u>Number</u>				
Rice mill	14	5	1	1	1
Feed company <u>2/</u>	13	31	6	1	32
Brewers	2	<u>3/</u>	<u>3/</u>	<u>3/</u>	<u>3/</u>
Domestic	-	2	2	1	-
Exporters	6	3	3	2	2
Territory <u>4/</u>	-	-	<u>4</u>	-	-
Total	35	41	16	5	35

1/ Does not include local cash sales, CCC or rice presented as gifts to employees.

2/ Includes brokers for feed firms.

3/ Handled by exporting firm.

4/ Puerto Rico sales.

Appendix Table 19.--Range of rough rice prices by type paid by study mills, September 1970 and January 1971 1/ 2/

CONSPPECTUS: Rough rice prices varied by 89 cents per barrel between mills in 1971. A rice cooperative could pay on a grade, quality, and type basis for all lots of rice.

Time Period and type of rice :	Mill						Price range for 5 mills
	C	F	B	A	D	;	
	Dollars per barrel						
September:							
Long	8.50	8.73	8.30	8.75	8.76		.46
Medium	8.03	8.11	7.80	7.89	7.66		.45
January:							
Long	8.89	8.52	7.01	7.00	7.04		1.89
Medium	8.21	8.13	7.32	8.60	8.61		1.29
Average:							
Long	8.70	8.63	7.66	7.88	7.90		1.04
Medium	8.12	8.12	7.56	8.25	8.14		.69
Weighted <u>3/</u>	8.45	8.21	7.56	8.24	8.09		.89

1/ Dry rice purchases.

2/ Cost of rice only and does not include freight or commission.

3/ Computed by percentages of long and medium grain rice purchased by mill.

Appendix Table 20.--Milled rice prices by mill, for September 1970
and January 1971 1/

CONSPECTUS: The same exporter paid the study mills different prices for the same rice. The consolidation of the 5 mills' rice sales would permit the cooperative to have greater bargaining power.

Mill	Time period 2/		
	: September	: January	Average
	<u>Dollars per hundredweight</u>		
D	7.98	8.00	7.99
B	7.92	8.10	8.01
A	7.77	8.12	7.95
F	8.02	7.92	7.97
C	8.01	8.00	8.01

1/ Prices are based on U.S. #5 medium, bagged, FAS Lake Charles, 20 percent broken and reasonably well milled. The prices include brokerage, freight, and bag costs for all mills.

2/ There is some variation in the time period. However, a review of the sales documents did not indicate any significant variations during the time period.

Appendix Table 21.--Rice bran prices by mill for September 1970 and January 1971

CONSPECTUS: The consolidation of the 5 mills' bran sales would give the cooperative greater bargaining power.

Mill	:	Time period		
		September 1/	January 2/	Average
<u>Dollars per ton 4/</u>				
D 3/		14.00	21.00	17.50
B		36.00	48.00	42.00
A		35.00	37.00	36.00
F		5/	5/	5/
C		25.00	30.00	27.50

1/ September 18, 1970 data except September 21, 1970 for Mill C.

2/ January 18-22, 1971 data except February 5, 1971 for Mill A.

3/ Mill feed (bran and hull combination.)

4/ FOB mill in bulk.

5/ Not available.

Appendix Table 22.--Estimated milling capacity for study mills,
1971

CONSPECTUS: The 5 study mills have excess milling capacity. They could have milled almost 4 times more rice in 1971 than they did.

Mill	: Barrels : per hour	: Annual milling : capacity	: Actual annual capacity : used as a percent of : projected capacity
<u>1,000 Barrels</u>			
D	400	3,168.0	22
B	450	3,564.0	15
A	225	1,782.0	29
C	225	1,782.0	46
F	<u>215</u>	<u>1,702.8</u>	<u>30</u>
Total	303 ^{4/}	11,998.8	26 <u>4/</u>

- 1/ The milling rate for medium grain rice was selected as the average rate for each of the mills. The higher milling rates for brown rice were estimated to off-set the lower milling rate for long rice.
- 2/ Annual milling capacity is based on 330 days and 24 hours per day operation.
- 3/ See Appendix Table 9 for total rough rice volume. Rough rice purchases are normally milled in the same season.
- 4/ Overall average.

Appendix Table 23.--Transportation methods used for milled rice,
1971 1/

CONSPECTUS: Milled rice is generally moved by rail.

Mill	Method of transportation			Total
	Truck	:	Rail	
	<u>Percent</u>			
C	64		36	100
E	-		100	100
B	5		95	100
F	-		100	100
A	18		82	100
D	2		98	100

1/ Milled rice movements not including ocean freighter shipments.

Appendix Table 24.--Handling methods used for milled rice, 1971 ^{1/}

CONSPECTUS: Milled rice is largely handled in bulk or bag. Two of the mills package rice for special markets.

Mill	Method of handling			Total
	Bulk	Bag	Packaged	
	<u>Percent</u>			
B	17	83	-	100
C	20	70	10	100
A	12	70	18	100
E	63	37	-	100
D	65	35	-	100
F	45	55	-	100

1/ Rice products are primarily handled on a bulk basis.

Appendix Table 25.--Condensed comparative statement of operations: Six mills with affiliated storage and drying operations, varying fiscal dates ending in 1969

CONSPICUS: This Appendix Table as well as Appendix Tables 26 and 27 show the operating results of a paper consolidation of the five firms simply by adding the figures together. The real opportunity for improved operating results can come about if astute management takes advantage of economies of scale and improved bargaining power.

Appendix Table 26 --condensed comparative statement of operations: Six mills with affiliated storage and drying operations, varying fiscal dates ending in 1970

CONSPECIUS: See Appendix Table 25.

		Mil's					
Item		F	C	B	A	D	E
		4/30/70	5/31/70	7/31/70	6/30/70	12/31/69	6/30/70
Net sales - clean rice	\$ 9,837,381	\$ -	\$ 4,112,747	\$ 4,199,808	\$ 10,185,725	\$ 4,032,064	\$ -
Other net sales (seed, by-products, fertilizer, soybeans, etc.)	<u>995,141</u>	<u>-</u>	<u>-</u>	<u>277,504</u>	<u>115,961</u>	<u>137,316</u>	<u>-</u>
Net sales	10,832,522	7,901,276	4,112,747	4,427,312	10,301,686	4,169,380	41,744,923
Less: Cost of sales	<u>9,487,762</u>	<u>7,199,530</u>	<u>3,445,589</u>	<u>3,735,630</u>	<u>8,933,111</u>	<u>3,567,442</u>	<u>36,369,064</u>
Gross margins	1,344,760	701,746	667,158	691,682	1,368,575	601,938	5,375,859
Other operating income	<u>73,500</u>	<u>-</u>	<u>1,200</u>	<u>-</u>	<u>10,707</u>	<u>-</u>	<u>85,407</u>
Total gross margins	1,418,260	701,746	668,358	691,682	1,379,282	601,938	5,461,266
Less: Expenses:							
Salaries and wages	393,067	248,692	267,387	270,487	394,886	229,751	1,804,270
Depreciation	65,938	44,423	21,186	70,742	50,395	86,694	342,338
Other	<u>778,282</u>	<u>433,960</u>	<u>378,643</u>	<u>426,689</u>	<u>687,277</u>	<u>279,065</u>	<u>2,983,916</u>
Total expenses	1,237,247	730,075	667,216	767,919	1,132,558	595,510	5,130,524
Operating income	181,013	(28,329)	1,142	(76,237)	246,724	6,428	330,742
Add: Other income	914	(7,286)	788	2,126	355	2,551	(552)
Less: Other expenses:							
Interest	69,125	126,137	100,672	102,725	100,232	22,619	(521,510)
State income taxes	<u>4,157</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(4,157)</u>
Total other expenses	(73,282)	(126,137)	(100,672)	(102,725)	(100,232)	(22,619)	(525,667)
Net pretax income	\$ 108,645	\$ (161,752)	\$ (98,742)	\$ (176,836)	\$ 146,848	\$ (13,640)	\$ (195,477)
Barrels milled	824,544	924,766	506,647	551,766	533,119	469,541	3,810,383

Appendix Table 27.--Condensed comparative statement of operations: Six mills with affiliated storage and drying operations, varying fiscal dates ending in 1971.

CONSPECTUS: See Appendix Table 25.

Item	F	C	B	A	D	E	Total 6 mills
	4/30/71	5/31/71	7/31/71	6/30/71	12/31/70	6/30/71	
Net sales - clean rice	\$ 10,179,231	\$ -	\$ 4,640,022	\$ 4,331,947	\$ 7,689,847	\$ -	
Other net sales (seed, by-products, fertilizer, soy-beans, etc.)	<u>694,408</u>	<u>-</u>	<u>-</u>	<u>404,991</u>	<u>1,02,468</u>	<u>-</u>	
Net sales	10,873,639	6,360,319	4,640,022	4,736,938	7,792,315	4,906,738	39,309,971
Less: Cost of sales	<u>9,524,303</u>	<u>5,558,990</u>	<u>3,743,332</u>	<u>4,005,295</u>	<u>6,714,499</u>	<u>4,121,169</u>	<u>33,667,588</u>
Gross margins	1,349,336	801,329	896,690	731,643	1,077,816	785,569	5,642,383
Other operating income	<u>81,000</u>	<u>-</u>	<u>1,200</u>	<u>-</u>	<u>15,030</u>	<u>-</u>	<u>97,230</u>
Total gross margins	1,430,336	801,329	897,890	731,643	1,092,846	785,569	5,739,613
Less: Expenses:							
Salaries and wages	416,432	228,250	307,012	174,639	307,311	253,074	1,686,718
Depreciation	69,971	48,317	20,884	69,639	55,387	77,555	341,753
Other	<u>688,137</u>	<u>406,382</u>	<u>406,109</u>	<u>456,095</u>	<u>548,072</u>	<u>285,680</u>	<u>2,790,475</u>
Total expenses	1,174,540	682,949	734,005	700,373	910,770	616,309	4,818,946
Operating income	255,796	118,380	163,885	31,270	182,076	169,260	920,667
Add: Other miscellaneous income (expense)	783	94	(1,386)	(1,301)	312	1,487	(11)
Less: Other expense:							
Interest	100,210	82,968	103,361	17,806	80,067	43,989	(428,401)
State income taxes	<u>4,566</u>	<u>-</u>	<u>2,359</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(6,925)</u>
Total other expenses	(104,776)	(82,968)	(105,720)	(17,806)	(80,067)	(43,989)	(435,326)
Net pretax income	\$ 151,803	\$ 35,506	\$ 56,779	\$ 12,163	\$ 102,321	\$ 126,758	\$ 485,330
Barrels milled	871,374	675,562	521,312	520,438	826,323	512,019	3,927,028

APPENDIX TABLE 28.--Condensed comparative balance sheet: Five mills consolidated with affiliated storage and drying operations, varying fiscal dates ending in 1969

CONSPECTUS: This Appendix Table as well as Appendix Tables 29 and 30 for 1970 and 1971 shows the financial resources available to management if the five mills were consolidated into one organization. The increased resources available could provide management the opportunity to produce results far greater than the amounts shown from simply adding the assets, net worth, and liabilities of five firms.

Item	F 4/30/69	G 5/31/69	B 7/31/69	A 6/30/69	D 12/31/68	E 6/30/69	Millions		Total 5 mills excluding MFC
Assets:									
Current assets:									
Cash	\$ 165,331	\$ -	\$ 233,077	\$ 167,712	\$ 123,972	\$ 177,805	\$ 867,897		
Accounts receivable	438,017	-	228,568	113,559	90,540	239,945	1,110,629		
Inventories	<u>1,798,043</u>	<u>-</u>	<u>186,431</u>	<u>518,790</u>	<u>561,076</u>	<u>33,964</u>	<u>3,098,304</u>		
Total current assets	2,401,391	-	648,076	800,061	775,588	451,714	5,076,830		
Fixed assets:									
Land, buildings, & equipment	1,211,809	781,004	936,288	2,023,790	931,483	1,408,217	6,511,587		
Less: Allowance for depreciation	<u>(316,766)</u>	<u>(122,383)</u>	<u>(476,336)</u>	<u>(1,246,484)</u>	<u>(378,796)</u>	<u>(790,333)</u>	<u>(3,208,715)</u>		
Net fixed assets	895,043	658,621	459,952	777,306	552,687	617,884	3,302,872		
Other assets	22,715	-	7,779	102,124	1,800	12,603	147,021		
Total assets	<u>\$ 3,319,149</u>	<u>\$ -</u>	<u>\$ 1,115,807</u>	<u>\$ 1,679,491</u>	<u>\$ 1,330,075</u>	<u>\$ 1,082,201</u>	<u>\$ 8,526,723</u>		
Liabilities & capital equities:									
Current liabilities:									
Accounts payable	\$ 787,755	-	\$ 583	\$ 183,845	\$ -	\$ 17,836	\$ 990,019		
Notes payable (inventory & seasonal)	925,000	-	614,000	325,000	449,126	-	2,313,126		
Other accruals & payables	<u>210,917</u>	<u>-</u>	<u>67</u>	<u>72,041</u>	<u>80,382</u>	<u>35,778</u>	<u>399,185</u>		
Total current liabilities	1,923,672	-	614,650	580,886	529,508	53,614	3,702,330		
Deferred liabilities:									
Notes payable	361,023	-	-	-	229,959	-	590,982		
Total deferred liabilities	361,023	-	-	-	229,959	-	590,982		
Capital equities:									
Common stock	701,000	-	135,000	200,000	147,611	300,000	1,483,611		
Retained earnings	<u>333,454</u>	<u>-</u>	<u>366,157</u>	<u>898,605</u>	<u>422,997</u>	<u>728,287</u>	<u>2,749,800</u>		
Total capital equities	1,034,454	-	501,157	1,098,605	570,608	1,028,587	4,233,411		
Total Liabilities and capital equities	<u>\$ 3,319,149</u>	<u>-</u>	<u>\$ 1,115,807</u>	<u>\$ 1,679,491</u>	<u>\$ 1,330,075</u>	<u>\$ 1,082,201</u>	<u>\$ 8,526,723</u>		
Net working capital	\$ 477,719	-	\$ 33,426	\$ 219,175	\$ 246,079	\$ 398,100	\$ 1,374,500		
Current ratio	-	-	-	-	-	-	1.37		

Appendix Table 29.--Condensed comparative balance sheet: Five mills consolidated with affiliated storage and drying operations, varying fiscal dates ending in 1970

CONSPECTUS: See Appendix Table 28.

Item	F 4/30/70	C 5/31/70	B 7/31/70	A 6/30/70	D 12/31/69	E 6/30/70	Total 5 mills excluding MFC	
							Mills	Mills
Assets:								
Current assets:								
Cash	\$ 322,411	\$ -	\$ 253,076	\$ 37,822	\$ 96,931	\$ 387,319	\$ 1,097,559	
Accounts receivable	345,080	-	146,761	131,816	200,503	28,803	852,963	
Inventories	<u>364,783</u>	<u>-</u>	<u>46,688</u>	<u>65,343</u>	<u>561,802</u>	<u>58,496</u>	<u>1,097,112</u>	
Total current assets	1,032,274	-	446,525	234,981	859,236	474,618	3,047,634	
Fixed assets:								
Land, building, & equipment	1,298,301	783,114	951,867	2,036,665	1,006,163	1,404,069	6,697,065	
Less: Allowance for depreciation	<u>(378,731)</u>	<u>(165,147)</u>	<u>(497,521)</u>	<u>(1,310,813)</u>	<u>(429,190)</u>	<u>(869,756)</u>	<u>(3,486,011)</u>	
Net fixed assets	919,570	607,967	454,346	725,852	576,973	534,313	3,211,054	
Other assets	29,952	-	11,986	98,397	49,500	18,760	208,595	
Total assets	<u>\$ 1,981,796</u>	<u>\$ -</u>	<u>\$ 912,857</u>	<u>\$ 1,059,230</u>	<u>\$ 1,485,709</u>	<u>\$ 1,027,691</u>	<u>\$ 6,467,283</u>	
Liabilities & capital equities:								
Current Liabilities:								
Accounts payable	\$ 485,945	-	\$ 7,419	\$ 51,467	\$ -	\$ 126	\$ 544,557	
Notes payable (inventory & seasonal)	-	-	475,000	12,000	583,395	-	1,070,395	
Other accruals and payables	<u>145,553</u>	<u>-</u>	<u>28,069</u>	<u>45,582</u>	<u>78,504</u>	<u>6,071</u>	<u>303,779</u>	
Total current liabilities	631,498	-	510,488	109,049	661,899	6,197	1,191,131	
Deferred liabilities:								
Notes & mortgages payable	235,694	-	-	-	194,458	-	430,152	
Total deferred liabilities	235,694	-	-	-	194,458	-	430,152	
Capital equities:								
Common stock	701,000	-	135,000	200,000	147,611	300,000	1,483,611	
Retained earnings	<u>413,604</u>	<u>-</u>	<u>267,369</u>	<u>750,181</u>	<u>481,741</u>	<u>721,94</u>	<u>2,634,389</u>	
Total capital equities	1,114,604	-	402,369	950,181	629,352	1,021,494	4,118,000	
Total liabilities and capital equities	<u>\$ 1,981,796</u>	<u>-</u>	<u>\$ 912,857</u>	<u>\$ 1,059,230</u>	<u>\$ 1,485,709</u>	<u>\$ 1,027,691</u>	<u>\$ 6,467,283</u>	
Net working capital	\$ 400,776	-	\$ (69,963)	\$ 125,932	\$ 197,338	\$ 468,421	\$ 1,128,503	
Current ratio	-	-	-	-	-	-	-	1.59

Appendix Table 30.--Condensed comparative balance sheet: Five mills consolidated with affiliated storage and drying operations, varying fiscal dates ending in 1971

CONSPECTUS: See Appendix Table 28.

Item	F 4/30/71	C 5/31/71	B 7/31/71	A 6/30/71	D 12/31/70	E 6/30/71	Mills		Total 5 mills excluding MFC
Assets:									
Current assets:									
Cash	\$ 73,639			\$ 181,683		\$ 104,619		\$ 535,638	\$ 1,083,468
Accounts receivable	301,478			221,232		165,266		32,205	1,732,086
Inventories	<u>809,016</u>			<u>87,689</u>		<u>820,154</u>		<u>52,013</u>	<u>1,872,853</u>
Total current assets	1,184,133			490,604	303,775	1,090,039		619,856	3,688,407
Fixed assets:									
Land, building, & equipment	1,342,314	792,612	893,344	2,052,455	1,077,469	1,467,584			6,833,166
Less: Allowance for depreciation	<u>(445,004)</u>	<u>(214,425)</u>	<u>(410,156)</u>	<u>(1,380,452)</u>	<u>(484,577)</u>	<u>(943,946)</u>			<u>(3,664,135)</u>
Net fixed assets	897,310	578,187	483,188	672,003	592,892	523,638		3,169,031	
Other assets	28,799			24,598	79,840	82,871	10,975		227,083
Total assets	\$ 2,110,242	\$ 2,110,242	\$ 998,390	\$ 1,055,618	\$ 1,765,802	\$ 1,154,469			\$ 7,084,521
Liabilities & capital equities:									
Current liabilities:									
Accounts payable	\$ 445,575			\$ 5,902	\$ 47,903	\$ 83,319	\$ 2,094		\$ 584,793
Notes payable (inventory & seasonal)				489,000	21,243	875,767			1,386,010
Other accruals and payables	<u>234,650</u>	<u>—</u>	<u>44,398</u>	<u>47,311</u>	<u>—</u>	<u>59,918</u>			<u>386,477</u>
Total current liabilities	680,225			539,500	116,457	959,086	62,012		2,357,280
Deferred liabilities:									
Notes & mortgages payable	167,278					152,708			319,986
Total deferred liabilities	167,278					152,708			319,986
Capital equities:									
Common stock	701,000			135,000	200,000	147,611	300,000		1,483,611
Retained earnings	<u>561,739</u>	<u>—</u>	<u>323,890</u>	<u>739,161</u>	<u>506,397</u>	<u>792,457</u>			<u>2,923,644</u>
Total capital equities	1,262,739			458,890	939,161	654,008	1,092,457		4,407,255
Total liabilities and capital equities	\$ 2,110,242			\$ 998,390	\$ 1,055,618	\$ 1,765,802	\$ 1,154,469		\$ 7,084,524
Net working capital	\$ 503,908			\$ (48,896)	\$ 187,318	\$ 130,953	\$ 557,844		\$ 1,331,127
Current ratio									1.56

Appendix Table 31.--Rice volume projected by condition and conditioning outlet 1/

CONSPECTUS: The producers now marketing green rice to the study mills and those who use cooperative driers represent about 50 percent of the volume specified by our marketing plan.

Condition of rice	Rice cooperative	Other	Total
<u>1,000 Barrels</u>			
Green:			
Study mills	1,089.8 <u>2/</u>	-	1,089.8
Other mills	<u>-</u>	<u>4,766.2</u>	<u>4,766.2</u>
Sub-total	1,089.8	4,766.2	5,856.0
Dry:			
Farm driers	1,342.9 <u>3/</u>	1,342.9	2,685.8
Co-op driers	1,757.0 <u>2/</u>	-	1,757.0
Proprietary driers	<u>1,516.8</u> <u>4/</u>	<u>(402.7)</u> <u>5/</u>	<u>1,114.1</u>
Sub-total	<u>4,730.8</u>	<u>826.1</u>	<u>5,556.9</u>
Total	5,706.5	5,706.4	11,412.9

1/ Volume data are based on 1971 production excluding rough rice stocks.

2/ All producers are assumed to continue marketing through Rice Co-op.

3/ One-half of farm drier producers is assumed to market through new Rice Co-op. See Appendix Table 3 for farm drier data.

4/ Residual volume required to complete projected volume of 50 percent.

5/ Green rice handled by proprietary driers for mills is not reflected in this data.

FARMER COOPERATIVE SERVICE
U.S. DEPARTMENT OF AGRICULTURE

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

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

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

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