California Wild Rice Growers Association:
1986 Crop Financial Projections

INTRODUCTION

Farmers in California's Fall River Mills area requested Agricultural Cooperative Service (ACS) to provide guidance in the establishment of a marketing cooperative to market their 1986 and future crops of wild rice. This report deals only with the marketing and problems of the 1986 crop.

During the 1986 production season, farmers in the Fall River Mills area entered into a multi obligatory contract between the farmers, a processing company, and a marketing firm. The farmers delivered the unprocessed rice to the processing company, and it processed the rice. However, the marketing firm failed to market the processed rice. A critical element in the marketing contract was that the producers would sell and be paid for their product when the marketing firm sold and delivered it. The net effect is that the farmers are still holding most of the 1986 inventory.

A bargaining cooperative, California Wild Rice Growers Association (CWRGA) was established to negotiate price and other terms of sale with the marketing firm and to finance the inventory of wild rice for post 1986 crops. To cope with the emergency of marketing the 1986 crop, CWRGC requested ACS's assistance in immediately redirecting its operations to include marketing.

THE MARKET

California wild rice growers adopted the California Wild Rice Program (CWRP), a marketing order, by grower referendum in May 1986 which was effective on June 5, 1986. This California marketing order establishes a seven member advisory board to the Director, California Department of Agriculture. The Act has four broad provisions which provide for;

1) research;
2) promotion and market development;
3) establishment of quality standards and grade regulations;
4) and, the establishment of a stabilization pool.

The act does not provide for restricting acreage or volume of production, only the amount that the pool will withhold from the market. The California Marketing Act of 1937, under which this order is established, does provide for production controls, however, none have been invoked for several years. The stabilization pool is not in effect for the 1986 crop nor is it expected to be invoked for the 1987 crop. Acreage assessments were invoked for the 1986/87 marketing season to provide funding for the operation of the order. So while a marketing order is in effect, it does not influence the current marketing problems encountered by CWRGA.

The market for 1986 wild rice appears very limited. From what can be learned from trade sources, the wholesale (large volume orders) market for 1986 crop wild rice is fully satisfied, thus demand for supplies in volume is very light or non existent. From contact with Riceland Foods, an Arkansas rice marketing cooperative, it is indicated that a market for small lot sales may exist, however, prices received will be depressed and highly competitive. As shown in table below, the rate of production growth has greatly overshadowed the rate of price stabilization. While supply has increased nearly 3 fold, prices have declined 57.5 percent. Some of the price stability may be explained by willingness of buyers to pay a reasonable price to assure future supply and marketers holding the product from the market place. The above being the case, marketers without established market outlets are unable to market their products, and CWRGA will have a difficult time selling the 1986 crop. Sales will probably be in small quantities to health food stores and other similiar outlets at reduced prices. Whether the entire inventory can be sold is questionable.

Production and Price of Wild Rice

Year	Production (million pounds)	Price (per pound)
1980	4.7	4.47
1981	3.9	3.79
1982	4.4	3.40
1983	5.3	3.30
1984	6.5	3.20
1985	13.4	2.97
1986	16.9 A/	1.90 B/

A/ Preliminary Estimate. According to information received from the Department of Agricultural Economics at University of Minnesota, the contract prices (early year contracts with major users) for wild rice averaged about $2.60 per pound.

B/ The estimated value of inventory held by CWRGA.

OVERVIEW OF PROPOSED OPERATIONS

The cooperative will begin marketing operations in January 1987 and market 240,000 pounds of 1986 crop milled dried wild rice on a pool basis. The quantity of inventory by grade and estimated market value is shown in table 1. We estimated the cooperative incurred $1,000 of legal expense as start-up costs which were paid with grower equity capital before August of 1986. We amortized these costs over 5 years. Milling charges owed to the processing plant are paid directly by the growers, not by the cooperative. Therefore, this payment is not shown in these projections.

Table 1--Milled wild rice inventory and estimated market value, January 1, 1987

Grade	Inventory	Market value	
		Per pound	Total
	Pounds	----- Dollars -----	
A..........	120,000	2.25	270,000
B & C......	60,000	2.25	135,000
D-1,2,3....	40,000	1.25	50,000
D-4........	12,000	0.00	0
Chits......	8,000	0.00	0
Total......	240,000	--	455,000

-- Not applicable

CASH FLOW STATEMENT

A cash flow statement shows the cash transactions which occur during a certain time period whether they apply to that particular fiscal operating period or not. It shows balance sheet items, such as fixed asset and equity changes, as well as operating statement items, such as product sales. See table 2.

Assumptions

Item:	Assumption:
Cash received:	
1. Sales	Sales made to wholesale buyers--50 percent in February and 50 percent in March. Prices received per pound are $2.25 per pound dried for grades A, B, and C and $1.25 per pound dried for grade D-1,2,3. No value for D-4 grade or chits. 50 percent of sales are C.O.D. and the remaining 50 percent are received 30 days after shipment.
2. Other sales	None forecasted at this time.
3. Per-unit retain assessment	None forecasted at this time. However, one will be added as the plans for the cooperative develop.
4. Transportation reimbursements	None forecasted at this time. The cooperative will pay freight.
5. Accounts receivable loan	Loan advances up to 75 percent of the outstanding value of accounts receivable are possible. If funds are available through this loan, they are drawn on before operating loan draws are made.
6. Operating loans	Funds are drawn when accounts receivable loan funds are either not available or are at their limit. Funds are available for up to 50 percent of the total cash shortage. Members invest in the cooperative in amounts equal to the loan advances before funds are released.
7. Membership dues	Members' need to invest $4,991 in addition to their original investment to leverage operating loan funds as described above.

8.	Interest income	The average monthly cash balance earns interest at the annual rate of 6.0 percent and is received the month after earned. Banks usually require some minimum amount of cash to be in a noninterest bearing account as a part of a loan package. Since no loan negotiations have yet been held, we have not shown this noninterest amount.

<u>Cash disbursed</u>:

1.	Grower payments	Producers are advanced $1.19 per pound of the estimated value for sellable dried rice 60 days after the co-op sells it.
2.	Wages	Manager's salary of $10,000 per year, plus fringe benefits (14.0 percent of base salary plus $144.56 medical insurance per month) and secretary's salary of $5.00 per hour plus fringe benefits (14 percent) 1 day per week.
3.	Packaging	75 percent of rice sold in bags costing $.30 per cwt of rice and 25 percent sold in bags costing $.90 per cwt. 1,000 bags purchased at a time in cash. $0.0015 per pound is added to pay the mill for bagging the bulk rice.
4.	Transportation	The 220,000 sellable pounds are shipped in 44,000 pound truck load lots. Each load costs $660.00 or $.015 per pound. The majority is shipped within State. Co-op pays all freight.
5.	Brokerage, advertising, & travel	10 percent brokerage fee on sales, $.014 per pound advertising expense and $.045 per pound travel allowance for sales trips.
6.	Insurance	$10,000 paid semi-annually.
7.	Maintenance	None forecasted.
8.	Utilities, phone, & miscellaneous	$.005 per pound expense for utilities, $.016 for phone, and $.023 per pound for miscellaneous.
9.	Office supplies	$250 monthly, starting in January.
10.	Legal fees & audit	$292 monthly, starting in January.

11. Taxes & licenses	$5,000 paid semi-annually.
12. Patronage refunds	None due.
13. Fixed asset loan payments	None. There are no fixed asset loans.
14. Equipment lease	None. There is no equipment leased.
15. Office rent	$50 monthly, starting in January.
16. A/R loan payments:	
A. Principle	Repayment of accounts receivable loan draws as cooperative receives payment for sales. None drawn in this projection.
B. Interest	Annual rate of 11.5 percent paid on the average monthly outstanding balance.
17. Operating loan payments:	
A. Principle	Repayment of operating loan draws occurs as cooperative has cash available.
B. Interest	Annual rate of 11.5 percent paid on the average monthly outstanding balance.

Table 2--Pro forma cash flow, fiscal year ending July 31, 1987

Item	August	September	October	November	December	January	February	March	April	May	June	July	Total
						Dollars							
Cash received:													
Sales	0	0	0	0	0	0	113,750	227,500	113,750	0	0	0	455,000
Other sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Per-unit retain assessment	0	0	0	0	0	0	0	0	0	0	0	0	0
Transportation reimbursements	0	0	0	0	0	0	0	0	0	0	0	0	0
A/R loan 1/	0	0	0	0	0	0	0	0	0	0	0	0	0
Operating loan	0	0	0	0	0	4,991	0	0	0	0	0	0	4,991
Membership dues	0	0	0	0	0	4,991	0	0	0	0	0	0	4,991
Interest income	0	0	0	0	0	0	0	164	826	1,252	875	543	3,659
Total received	0	0	0	0	0	9,982	113,750	227,664	114,576	1,252	875	543	468,641
Cash disbursed:													
Grower payments	0	0	0	0	0	0	0	0	130,900	130,900	0	0	261,800
Wages	0	0	0	0	0	1,290	1,290	1,290	1,290	1,290	1,290	1,290	9,031
Packaging	0	0	0	0	0	600	600	600	0	0	0	0	1,800
Transportation	0	0	0	0	0	0	1,650	1,650	0	0	0	0	3,300
Brokerage, advertis., & travel	0	0	0	0	0	0	29,240	29,240	0	0	0	0	58,480
Insurance	0	0	0	0	0	5,000	0	0	0	0	0	5,000	10,000
Maintenance	0	0	0	0	0	0	0	0	0	0	0	0	0
Utilities, phone, & misc.	0	0	0	0	0	0	4,840	4,840	0	0	0	0	9,680
Office supplies	0	0	0	0	0	250	250	250	250	250	250	250	1,750
Legal fees & audit	0	0	0	0	0	292	292	292	292	292	292	292	2,042
Taxes & licenses	0	0	0	0	0	2,500	0	0	0	0	0	2,500	5,000
Patronage refund	0	0	0	0	0	0	0	0	0	0	0	0	0
Fixed asset loan payments	0	0	0	0	0	0	0	0	0	0	0	0	0
Equipment lease	0	0	0	0	0	0	0	0	0	0	0	0	0
Office rent	0	0	0	0	0	50	50	50	50	50	50	50	350
A/R loan payments:													
Principle	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest	0	0	0	0	0	0	0	0	0	0	0	0	0
Operating loan payments:													
Principle	0	0	0	0	0	0	4,991	0	0	0	0	0	4,991
Interest	0	0	0	0	0	0	24	24	0	0	0	0	48
Total disbursed	0	0	0	0	0	9,982	43,227	38,236	132,782	132,782	1,882	3,382	368,271
Net cash flow	0	0	0	0	0	0	70,523	189,428	-18,206	-131,520	-1,007	[illegible]	100,370
Cash balance, previous year	0												
Ending cash balance	0	0	0	0	0	0	70,523	259,951	241,745	110,215	109,208	100,370	

1/ Loan based on financing of accounts receivable (A/R).

OPERATING STATEMENT

An operating statement shows operating income and expense items incurred whether paid or not for a certain time period. It does not show balance sheet items--assets, liabilities, or equity. See table 3.

Assumptions

Item:	Assumption:
Revenue:	
1. Marketing fees	Sales receipts minus producer payments.
2. Other revenue	Interest income received and accrued.
Expenses:	
1. Wages	Directly from cash flow.
2. Packaging	Cash flow value less year-end inventory of packaging material.
3. Transportation	Directly from cash flow.
4. Brokerage, advertising & travel	Directly from cash flow.
5. Insurance	Adjusted for 7 month operating year. Remainder is included as a prepaid expense on the balance sheet.
6. Maintenance	None forecasted.
7. Utilities, phone, & miscellaneous	Directly from cash flow.
8. Office supplies	Directly from cash flow.
9. Legal fees & audit	Directly from cash flow.
10. Taxes & licenses	Adjusted for 7 month operating year. Remainder is included as a prepaid expense on the balance sheet.
11. Lease & rent payments:	
A. Equipment	There are no leases.
B. Office	Directly from cash flow.

12. Interest payments:

A. Operating loan	Interest incurred and paid during period.
B. Accounts receivable loan	No funds drawn.
C. Fixed asset loan	None.

13. Amortization	The portion of startup costs which are charged to this operating period.
14. Net savings	Total revenue minus total expenses.
15. Application of previous loss	No previous losses exist.

16. Funds available for distribution:

A. Cash refund payable	The portion of net savings which will be paid in cash to growers after year end. IRS requires cooperatives to pay at least 20 percent of refunds in cash within 8 1/2 months after the close of the fiscal year. A higher cash refund percentage may be paid if the cooperative is in sound financial condition.
B. Allocated net savings	The portion of net savings which is retained by the cooperative and allocated to the growers' equity accounts on the cooperative's books.

Table 3--Pro forma operating statement, fiscal year ending July 31, 1987

Item	Total	Per unit 1/
	Dollars	
Revenue:		
Marketing fees................	193,200	0.878
Other revenue (interest)......	4,180	0.019
Total revenue..............	197,380	0.897
Expenses:		
Wages.........................	9,031	0.041
Packaging.....................	1,320	0.006
Transportation................	3,300	0.015
Brokerage, advertis., & travel	58,480	0.266
Insurance.....................	5,833	0.027
Maintenance...................	0	0.000
Utilities, phone, & misc......	9,680	0.044
Office supplies...............	1,750	0.008
Legal fees & audit............	2,042	0.009
Taxes & licenses..............	2,917	0.013
Lease & rent payments:		
Equipment...................	0	0.000
Office......................	350	0.002
Subtotal....................	94,703	0.430
Interest-operating loan.......	48	0.000
-A/R loan............	0	0.000
-fixed asset.........	0	0.000
Amortization 2/...............	200	0.001
Total expenses..............	94,951	0.432
Net savings....................	102,429	0.466
	=======	======
APPLICATION OF PREVIOUS LOSS....	0	0.000
FUNDS AVAILABLE FOR DISTRIBUTION		
CASH REFUND PAYABLE-20%.......	20,486	0.093
ALLOCATED NET SAVINGS-80%.....	81,943	0.372

1/ Per pound of sales.
2/ Amortization of organizational costs over 5 years.

BALANCE SHEET

A balance sheet gives a picture of the financial condition of an organization as of a certain date. It shows assets, liabilities, and equity values as of its date. Therefore, the values would be different if the balance sheet was completed at any other time. It includes an accumulation of data found on the cash flow and the operating statement. See table 4.

Assumptions

Item:	Assumption:
Assets:	
1. Cash	Cash flow year end cash balance.
2. Inventory	Value of unused packaging material(bags).
3. Prepaid expenses	Value of insurance premiums and taxes paid that cover a future period.
4. Accounts receivable:	
A. Sales	No balance. Accounts are collected before July 31.
B. Capital retains	None.
C. Interest receivable	Interest accrued on July's average cash balance but not received.
5. Lease deposits	None.
6. Organizational expenses	Costs associated with organizing the cooperative.
7. Accumulated amortization	Total amount of organizational expenses which have been written off as of the balance sheet date.
Liabilities and Member Equity:	
1. Operating loan:	
A. Interest	None. Loan is repaid before year-end.
B. Principle	None. Loan is repaid before year-end.
2. Accounts receivable loan:	
A. Interest	None due.
B. Principle	No funds drawn.
3. Fixed asset loan principle	No fixed asset loan.
4. Grower payments	No balance, growers are repaid before year end.

5.	Patronage refund payable	Cash portion of net savings which will be paid to members within the next 8 1/2 months
6.	Facility lease payment	None due.
7.	Long-term liabilities	Cooperative does not have any long-term liabilities.
8.	Membership dues	Total amount of membership dues invested by members as of the date of the balance sheet.
9.	Allocated net savings	Sum of the allocated net savings from operating periods up to and including the date of this balance sheet.
10.	Unallocated net savings	None.
11.	Capital retains	None are projected for this cooperative yet. They will be added to projections before a final report is prepared.

Table 4--Pro forma balance sheet, as of July 31, 1987

Item	Dollars
ASSETS	
Current	
Cash	100,370
Inventory	480
Prepaid expenses	6,250
Accounts receivable	
Sales	0
Capital retains	0
Interest receivable	520
Total current	107,620
Fixed	
Lease deposits	0
Organizational expenses	1,000
Less	
Accumulated amortization	200
Net fixed	800
TOTAL ASSETS	108,420
LIABILITIES and MEMBER EQUITY	
Current liabilities	
Operating loan	
Interest	0
Principle	0
A/R loan	
Interest	0
Principle	0
Fixed asset loan principal	0
Grower payments	0
Patronage refund payable	20,486
Facility lease payment	0
Total current	20,486
Long term liabilities	0
Member equity	
Membership dues	5,991
Allocated net savings	81,943
Unallocated net savings	0
Capital retains	0
Total member equity	87,934
TOTAL LIABILITIES AND MEMBER EQUITY	108,420

SENSITIVITY ANALYSIS

Due to the current wild rice marketing situation, the assumptions above were revised to determine sensitivity to sales price, sales volume, and sales timing changes. We completed projections with each change made separately and then combined the three changes into a final worst case scenario to determine their effect on grower returns. A description of the scenarios follow:

1. Best Case = Our primary assumptions.

2. Price drop = Average price received for rice is lowered 33 percent to $1.386 per pound sold. Volume sold remains 220,000 pounds.

3. Volume drop = Only the grade A wild rice is sold (120,000 pounds). Its price remains $2.25 per pound sold.

4. Sales delay = Sales occur evenly over 4 months starting in February, 220,000 pounds of rice sold, and the average price remains $2.068 per pound sold.

5. Worst case = Average price received for the grade A rice is lowered 33 percent to $1.50 per pound, only the grade A rice is sold, and sales occur evenly over 4 months starting in February.

Table 5 summarizes our findings for the 5 different situations.

In reviewing the projection results, note that in the price drop (#2) and worst case (#5) scenarios grower payments have not been reduced commensurate with the reduction in the cooperative's total rice sales. This results in the cooperative having small net savings. It is important for growers to remember the cooperative has to at least break even to remain viable. Grower payments in the other scenarios could be increased (marketing fees reduced) above the $1.19 to reduce the amount of net savings if market prices remain at the levels projected in those scenarios.

As expected, the price drop scenario (#2) shows a nearly direct relationship between price received and total grower receipts. Grower payments must be lowered as market prices drop to the lowest level of all of the scenarios for the cooperative to break even. However, total grower receipts per inventory pound are at the midpoint of the five scenarios. The 33 percent price drop was an arbitrary value and it is not intended to be taken as a market forecast.

In the volume drop scenario (#3), growers' income per pound sold and the cooperative's net savings per pound are both the highest of the five scenarios presented. However, only 50 per cent of the volume is sold and total grower receipts per pound of inventory are the second lowest of the five scenarios. A large amount of the net savings shown result from our using the grade A market price of $2.25 per pound for sales in this scenario. If the average price ($2.068) from the best case scenario was used, total receipts per inventory pound would be reduced $0.364.

Table 5--Impact on operating results of selected changes in assumptions

Item	#1 Best case	#2 Price drop	#3 Volume drop	#4 Sales delay	#5 Worst case
			Dollars		
Equity investments needed 1/.......	5,991	5,991	5,991	5,991	6,278
Total rice sales.	455,000	304,850	270,000	455,000	180,000
Price:					
Per pound sold..	2.068	1.386	2.250	2.068	1.500
Per inventory pound.........	1.896	1.270	1.125	1.896	0.750
Grower payments: 2/					
Total...........	261,800	224,400	142,800	261,800	124,800
Per pound sold..	1.190	1.020	1.190	1.190	1.040
Per inventory pound.........	1.091	0.935	0.595	1.091	0.520
Net savings:					
Total...........	102,429	2,242	65,715	101,818	1,062
Per pound sold..	0.466	0.010	0.548	0.463	0.009
Per inventory pound..........	0.427	0.009	0.274	0.424	0.004
Total grower receipts:					
Per pound sold..	1.656	1.030	1.738	1.653	1.049
Per inventory pound..........	1.518	0.944	0.869	1.515	0.524

1/ Includes initial organizational investment of $1,000.
2/ The payment to growers made for their wild rice during the marketing season.

Changing the rate at which the cooperative is able to sell the rice (scenario #4) has little impact on the cooperative's net savings or on total grower receipts when market prices, grower payments, and grower payment schedules remain stable. Interest income is reduced because funds are not received as quickly and average monthly cash balances are reduced. Interest expense does not increase since growers are not paid until the cooperative receives payment. If a lower market price was received, grower payment schedules speeded up, or grower payments were higher, the cooperative's end of month cash balance would be reduced and the need for borrowed monies and equity investments would be increased.

Table 6 is the operating statement which results when prices drop, volume sold drops, and sales are delayed--all at the same time(scenario #5). The cooperative's net worth is reduced to the lowest level of all of the scenarios. As in scenario #3, total grower receipts per pound of inventory rather than per pound sold is the important measure of results. This scenario resulted in the second lowest grower payment, the lowest net savings, and the lowest total grower receipts per inventory pound of all scenarios. It also requires the largest equity investment. The market price lowered the amount of money the cooperative had to work with. Even though grower payments were also reduced, additional working capital through both increased borrowings and increased equity investments were needed. The end of year cash balance of the cooperative is 0 indicating additional equity investments above $6,278 would be needed the second year.

As shown, the cooperative's income is most impacted by market price changes while total grower's receipts are most impacted by volume drops. This is due to the 2 for 1 aspect of a price drop which exists when only 50 per cent of the rice is sold. Each time the market price drops 1 cent, grower income drops by 2 cents. Thus, total grower receipts are more sensitive to whether the entire crop is sold than to market price changes. The cooperative cannot control either market prices or demand. We cannot say whether the cooperative can market rice under the scenarios discussed or not, but we consider the possibility of a large price drop and/or not being able to sell all of the 1986 crop to be highly likely.

Table 6--Pro forma operating statement for worst case scenario, year ending July 31, 1987

Item	Total	Per unit 1/
	Dollars	
Revenue:		
Marketing fees................	55,200	0.460
Other revenue (interest)......	914	0.008
Total revenue..............	56,114	0.468
Expenses:		
Wages........................	9,031	0.075
Packaging....................	720	0.006
Transportation...............	1,800	0.015
Brokerage, advertis., & travel	25,080	0.209
Insurance....................	5,833	0.049
Maintenance..................	0	0.000
Utilities, phone, & misc......	5,280	0.044
Office supplies..............	1,750	0.015
Legal fees & audit...........	2,042	0.017
Taxes & licenses.............	2,917	0.024
Lease & rent payments:		
Equipment..................	0	0.000
Office.....................	350	0.003
Subtotal...................	54,803	0.457
Interest-operating loan.......	49	0.000
-A/R loan.............	0	0.000
-fixed asset.........	0	0.000
Amortization 2/...............	200	0.002
Total expenses.............	55,052	0.459
Net savings...................	1,062	0.009
APPLICATION OF PREVIOUS LOSS....	0	0.000
FUNDS AVAILABLE FOR DISTRIBUTION		
CASH REFUND PAYABLE-20%.......	212	0.002
ALLOCATED NET SAVINGS-80%.....	850	0.007

1/ Per pound sold
2/ Amortization of organizational costs over 5 years.