

PALMER, ALASKA
MAY 1960

UNIVERSITY OF ALASKA

ALASKA AGRICULTURAL EXPERIMENT STATION

Three Year Summary of
INVESTMENT,
COST & INCOME
for DAIRY FARMS
in Alaska

A. DALE SAUNDERS
H. P. GAZAWAY
C. F. MARSH

A FARM MANAGEMENT PROGRESS REPORT

A THREE YEAR SUMMARY OF INVESTMENTS, COSTS AND INCOME FOR ALASKA DAIRY FARMS

THIS STUDY IS BASED ON 15 DAIRY FARMS IN THE MATANUSKA VALLEY DURING THE THREE YEARS OF 1957 THROUGH 1959. THESE FARMS RANGED IN SIZE FROM 10 TO 50 COWS AND INCLUDED NEITHER THE LARGEST NOR THE SMALLEST. WHILE THERE IS CONSIDERABLE VARIATION BETWEEN INDIVIDUAL FARMS, AS A GROUP THEY ARE BELIEVED TO BE REPRESENTATIVE OF DAIRYING IN THE AREA.

RECORDS FROM THE SAME 15 FARMS WERE OBTAINED IN 1957 AND 1958. BY 1959 HOWEVER, ONE FARM WAS COMBINED WITH ANOTHER, AND ANOTHER OF THE ORIGINAL 15 FARMS SOLD. THESE TWO WERE REPLACED WITH DAIRIES AS NEARLY SIMILAR IN SIZE AND CHARACTER AS POSSIBLE. SIMILAR MANAGEMENT DATA WAS PROVIDED BY ONE COOPERATING DAIRYMAN IN THE TANANA VALLEY IN 1957, ANOTHER WAS ADDED IN 1957 AND 1958. FOUR ARE GOING TO PROVIDE INFORMATION ON THEIR 1960 OPERATIONS. AS NEW FARMS ARE STARTED IN THIS AND OTHER AREAS, MORE FARM BUSINESS COOPERATORS ARE TO BE ADDED TO THIS STUDY. ANNUAL REPORTS WILL THEN BE PREPARED FOR EACH AREA AND INDIVIDUAL.

THE COST OF MOST ITEMS OF PRODUCTION ARE HIGHER IN THE TANANA VALLEY AREA. THEY ARE PERHAPS 10 PER CENT MORE THAN FOR COMPARABLE FARMS IN THE MATANUSKA VALLEY. AT THE PRESENT TIME AND STAGE OF DEVELOPMENT, CAPITAL REQUIREMENTS APPEAR TO BE EQUAL OR GREATER. ADEQUATE DAIRY HOUSING IS MORE OF A PROBLEM. HOWEVER, ONCE A DAIRY OR OTHER FARM BECOMES ESTABLISHED HERE, SOME OF THESE DIFFERENCES THAT ADD TO PRODUCTION COSTS MAY LESSEN. CROP LAND IS AVAILABLE IN LARGER BLOCKS AND CLEARING COSTS ARE LESS IN MANY INSTANCES. THE ALTERNATIVE USES OF CROP LANDS ARE FEWER, TAXES ARE NOW LESS, AND SO MAY BE PRIVATE LAND PRICES AND RENT.

SUMMARY OF 1959 RESULTS

GOALS: VOLUME WITH LOW COSTS - AS IN THE TWO PREVIOUS YEARS OF THE STUDY, THERE APPEARS TO BE SIX KEY FACTORS WHICH STAND OUT BETWEEN THE LOW AND HIGH INCOME FARMS. THEY ARE:

- | | |
|--------------------------|------------------------------|
| o NUMBER OF COWS MILKED | o YEARS ON FARM AND DAIRYING |
| o PRODUCTION PER COW | o COST OF MILK PRODUCED |
| o AMOUNT OF INDEBTEDNESS | o ACRES OF LAND FARMED |

OF THESE SIX KEY FACTORS, VOLUME OF PRODUCTION, COST OF PRODUCTION AND NUMBER OF YEARS OF OPERATION SEEM MOST IMPORTANT. GOOD COWS, AND MANAGEMENT ARE NECESSARY IN A SUCCESSFUL DAIRY OPERATION ANYWHERE AND PARTICULARLY WITH HIGH COSTS UNDER ALASKAN CONDITIONS. THE NUMBER OF YEARS IN OPERATION IS IMPORTANT PRIMARILY BECAUSE MOST STARTING DAIRY FARMS ARE SMALL, CARRY AN EXCESSIVE AMOUNT OF DEBT WITH SIZABLE PAYMENTS. PERIOD OF TIME IS REQUIRED FOR MOST OPERATORS TO BECOME ADJUSTED TO DAIRYING AND A NEW LOCALITY, FARM OR HERD. SEVERAL YEARS EXPERIENCE IS OFTEN NECESSARY BEFORE HIGH PRODUCTION AND LOW COSTS ARE POSSIBLE.

LARGEST HERD DOES NOT MAKE THE HIGHEST INCOME - THE HERD SIZE OF THE THREE HIGHEST INCOME FARMS WAS LARGER THAN FOR EITHER THE THREE LOW ONES OR THE AVERAGE OF ALL 1.5, ALTHOUGH THE TWO FARMS WITH THE LARGEST NUMBER OF COWS WERE NOT AMONG THE HIGHEST INCOME FARMS. A COMBINATION OF BELOW AVERAGE PRODUCTION AND RESULTING HIGHER COSTS PER HUNDRED HELD THESE TO ONLY AVERAGE INCOMES. THE THREE HIGH INCOME FARMS WERE AMONG THE TOP FOUR IN PRODUCTION PER COW, WHILE LOW INCOME FARMS WERE ONLY AVERAGE OR BELOW.

EQUALLY IMPORTANT AND CLOSELY RELATED TO PRODUCTION PER COW WAS COST OF PRODUCTION. IN 1959, THE AVERAGE PRICE THIS GROUP RECEIVED FOR MILK WAS \$10.95 A HUNDREDWEIGHT. AT THIS PRICE IT WOULD HAVE TAKEN 6,584 POUNDS OF MILK TO PAY THE \$721 COST OF KEEPING A COW FOR ONE YEAR. THIS MEANS THAT A COW GIVING 12,000 POUNDS OF MILK A YEAR SHOULD RETURN A NET CASH INCOME OF \$500 TO \$600 OR DOUBLE THAT FOR A COW WITH 9,000 POUNDS.

WIDE VARIATION IN COSTS BETWEEN DAIRIES - THE COST OF MILK PRODUCTION ON THE LOW-INCOME FARMS WAS \$1.50 PER HUNDREDWEIGHT HIGHER THAN ON THE HIGH INCOME FARMS. THIS VARIATION WAS LESS THAN IN PRIOR YEARS. THIS DIFFERENCE WAS COMPRISED OF 99¢ FEED COSTS AND 51¢ FOR NON-FEED EXPENSES. THE PURCHASED FEED COSTS WERE 17¢ PER HUNDREDWEIGHT MORE ON THE HIGH INCOME FARMS, BUT THE COST OF THE HOME-GROWN FEED WAS \$1.16 LESS.

THE LOWER COST OF PRODUCING MILK ON THE HIGHER INCOME FARMS REFLECTS TWO FACTORS: (1) THE COSTS PER COW WERE \$80 LESS AND (2) THE COST OF PRODUCTION IS SPREAD OUT OVER 2,000 POUNDS MORE MILK PER COW. THESE ARE OPERATING OR CASH COSTS. THEY TELL ONLY PART OF THE STORY. TO GET THE COMPLETE PICTURE REQUIRES RECORDS AS TO INVENTORY VALUES AND DEPRECIATION ON MACHINERY, BUILDINGS AND LIVESTOCK ALONG WITH INTEREST ON INVESTMENT IN LAND AND RETURNS FOR OPERATORS' AND UNPAID FAMILY LABOR.

THE AMOUNT OF INDEBTEDNESS, TWICE AS MUCH ON THE LOW-INCOME FARMS, CONTRIBUTED SUBSTANTIALLY TO INCREASED COSTS OF PRODUCTION. THE HIGHER INCOME FARMS PAID AN AVERAGE OF 28¢ PER HUNDREDWEIGHT FOR INTEREST ON DEBTS AS COMPARED WITH \$1.05 ON THE LOW-INCOME FARMS.

LESS CROP ACRES FARMED PER COW ON HIGHER INCOME DAIRIES - THE HIGH-INCOME GROUP FARMED OVER 50 ACRES MORE IN CROPS BUT AVERAGED 2.4 ACRES LESS PER COW THAN THE LOW-INCOME FARMS. THE HIGH-INCOME FARMS OWNED SLIGHTLY MORE LAND THAN THEY RENTED WHILE THE LOW-INCOME FARMS RENTED 1.6 PER CENT MORE CROP LAND THAN THEY OWNED. IN SOME CASES THE RENTED LAND WAS LOCATED SEVERAL MILES FROM THE FARM HEADQUARTERS. NOT ALL OF THE FEED CROPS RAISED WERE CONSUMED ON THE HOME FARM. TWO OF THE HIGHER AND ONE OF THE LOWER INCOME FARMS HAD SALES OF GRAIN AND HAY IN EXCESS OF \$2,000.

AS A RULE OF THUMB IT COSTS A MINIMUM OF ABOUT \$75 AN ACRE TO PRODUCE FEED IN THIS AREA. THIS SUGGESTS THAT WHERE MORE THAN 5 TO 6 ACRES PER COW IS REQUIRED TO GROW ENOUGH FEED AND BEDDING, A DAIRYMAN MAY BE ABLE TO BUY ALL FEED FOR LESS THAN IT COSTS TO RAISE IT AND WITH CONSIDERABLY LESS INVESTMENT, RISK OR EFFORT. FIVE ACRES OF

AVERAGE OR BETTER QUALITY CROPLAND SHOULD PROVIDE ALL THE ROUGHAGE, BEDDING AND PART OF THE GRAIN NECESSARY TO KEEP A COW IN TOP PRODUCTION.

AN IMPORTANT FACTOR CONTRIBUTING TO THE PRODUCTION, COSTS AND MANAGEMENT OF ALL THE DAIRY FARMS STUDIED WAS THE LENGTH OF TIME THESE FARMS HAD BEEN UNDER THEIR PRESENT OWNERSHIP. EACH HIGH INCOME FARMER HAD BEEN ON HIS PRESENT FARM FOR A PERIOD OF TEN OR MORE YEARS. ON THE LOWER-INCOME FARMS, TWO OF THE THREE FARMERS HAD OPERATED THEIR PRESENT FARM FOR A PERIOD OF FIVE YEARS OR LESS. THIS FACTOR OF TENURE IS HARD TO EVALUATE IN TERMS OF DOLLARS AND CENTS OR POUNDS OF MILK BUT IT UNDOUBTEDLY CONTRIBUTES TO THE HIGHER COSTS, SMALLER HERDS AND LOWER PRODUCTION OF THE COWS.

HIGHER INVESTMENT PER COW ON LOWER-INCOME FARMS - IT IS NOT SURPRISING TO FIND THAT NEWER LOW-INCOME FARMERS HAVE OVER \$1,000 MORE INVESTMENT PER COW AND A 40 PER CENT SMALLER EQUITY IN THEIR FARMS. WHEN A HIGH RATE OF INVESTMENT AND INDEBTEDNESS IS COMBINED WITH A SMALL HERD AND LOW PRODUCTION PER COW IT BECOMES ALMOST IMPOSSIBLE TO DEVELOP A DAIRY WITHOUT OFF-FARM INCOME.

WHERE IS YOUR BREAK-EVEN POINT? OTHER MANAGEMENT STUDIES SHOW THAT FEW FARMERS KEEP OR USE THEIR ANNUAL INVENTORY RECORDS THOUGH MOST OF THE DATA NECESSARY TO DO SO ARE REQUIRED TO PREPARE A FARM INCOME TAX RETURN. AN ANNUAL REVIEW OF NET WORTH STATEMENTS OVER A PERIOD OF YEARS IS THE MOST SIMPLE AND PERHAPS MOST REVEALING ANALYSIS THAT CAN BE MADE TO DETERMINE FINANCIAL PROGRESS.

THE DAIRYMAN WHO KEEPS A COMPLETE INVENTORY, CASH COST, AND SUPPLEMENTARY RECORDS CAN TELL WHAT HAY OR SILAGE COSTS PER TON, WHICH COWS ARE MAKING THE MOST MONEY AND DETERMINE HIS FINANCIAL STATUS AT ANY TIME OR PROGRESS FROM YEAR TO YEAR. MOST FARMERS COULD SIGNIFICANTLY IMPROVE THE MANAGEMENT OF THEIR FARM BUSINESS WITH A FEW HOURS INSTRUCTION ON HOW TO KEEP AND USE RECORDS AND BY SYSTEMATICALLY WORKING ON THEM ONE OR TWO HOURS A WEEK. ADEQUATE RECORDS WILL ALSO POINT OUT LEAKS, GIVE ADVANCE NOTICE AS TO PROBLEMS AS WELL AS FACILITATE BORROWING OR THE SALE OF GOOD STOCK OR A SUCCESSFUL FARM.

YOUR DISTRICT EXTENSION AGENT WILL ARRANGE A SHORT COURSE IN FARM RECORD KEEPING AND BUSINESS ANALYSIS WHEN THERE IS SUFFICIENT INTEREST. PUBLICATIONS ON FARM BUSINESS MANAGEMENT ARE AVAILABLE THROUGH THE SAME SOURCE.

FARM BUSINESS FACTS ON FIFTEEN MATANUSKA VALLEY
DAIRY FARMS FOR 1959

		THREE HIGHEST INCOME	AVERAGE ALL FARMS	THREE LOWEST INCOME
PRODUCTION				
PER FARM	POUNDS	328,644	228,318	149,567
COWS (2 YEARS OLD & OVER IN HERD)	NUMBER	29	25	16
PER COW	POUNDS	11,441	9,159	9,413
AVERAGE COWS MILKED DURING YEAR	NUMBER	26	21	14
PER COW	POUNDS	12,533	11,009	10,760
CROP LAND				
TOTAL FARMED	ACRES	189	149	142
OWNED	ACRES	96	88	60
RENTED	ACRES	93	61	82
PER COW IN HERD	ACRES	6.5	6.0	8.9
FARM INVESTMENT				
TOTAL	DOLLARS	80,158	66,303	57,088
OWNER'S EQUITY	DOLLARS	63,118	38,793	21,303
INDEBTEDNESS	DOLLARS	17,040	27,510	35,785
RATIO INDEBTEDNESS TO EQUITY	PER CENT	23.3	43.7	63.8
INTEREST PAID ON INDEBTEDNESS	DOLLARS	916	1,334	1,572
MACHINERY	DOLLARS	12,576	10,649	7,097
PER CROP ACRE	DOLLARS	68	71	62
PER COW: (2 YEARS OLD & OVER)	DOLLARS	2,807	2,815	3,627
(AVERAGE NUMBER MILKED)	DOLLARS	3,070	3,430	4,178
GROSS CASH INCOME				
TOTAL MILK SALES	DOLLARS	35,116	24,508	15,971
OTHER FARM INCOME	DOLLARS	3,003	1,984	770
TOTAL FARM INCOME	DOLLARS	38,119	26,492	16,741
AVERAGE PRICE FOR MILK SOLD (CWT.)	DOLLARS	10.80	10.95	11.15
CASH COSTS OF MILK PRODUCED				
TOTAL PER CWT.	DOLLARS	6.32	7.67	7.82
NON-FEED COST PER CWT.	DOLLARS	2.39	2.91	2.90
FEED COST PER CWT.	DOLLARS	3.93	4.76	4.92
FOR FEED PURCHASED PER CWT.	DOLLARS	2.37	2.19	2.20
FOR FEED RAISED PER CWT.	DOLLARS	1.56	2.57	2.72
PER COW IN HERD	DOLLARS	726	721	806
PER COW IN PROD. (AVE. NO. MILKED)	DOLLARS	799	867	911
NET CASH INCOME				
PER FARM	DOLLARS	14,367	7,523	3,681
PER COW (2 YEARS OLD & OVER)	DOLLARS	532	321	252
PER COW (AVE. NO. MILKED)	DOLLARS	579	389	302

THREE YEAR SUMMARY

BASED ON THE INFORMATION COLLECTED FROM THESE 15 FARMS DURING THE PERIOD OF 1957 THROUGH 1959, THE FOLLOWING CHANGES AND TRENDS WERE NOTED:

PRODUCTION - THE AVERAGE PRODUCTION PER DAIRY INCREASED BETWEEN 1957 AND 1959 BY 58,000 POUNDS. THIS WAS LARGELY THE RESULT OF AN INCREASE IN THE NUMBER OF COWS BEING MILKED. THE AVERAGE NUMBER ON THESE FARMS INCREASED BY FOUR, BUT MORE IMPORTANT THE AVERAGE NUMBER BEING MILKED INCREASED BY SIX. THIS MEANS THERE WERE FEWER "FREE BOARDERS" BEING KEPT AND THE RESULTING EFFICIENCY IS REFLECTED NOT ONLY IN HIGHER PRODUCTION, BUT IN REDUCED COSTS PER HUNDRED AND HIGHER INCOMES AS WELL.

ACRES IN CROPS - THERE WAS A SLIGHT INCREASE IN ACRES OF OWNED LAND BEING FARMED; HOWEVER, THE ACREAGES OF RENTED CROP LAND INCREASED NEARLY THREE TIMES. SEVERAL OPERATORS CEASED DAIRYING AND THOSE REMAINING HAVE EITHER BOUGHT OR RENTED ADDITIONAL CROP LAND. THIS RESULTED IN BETTER UTILIZATION OF MACHINERY AND SOME REDUCTION IN COSTS OF FARM-RAISED FEEDS. THE TREND TOWARD FARMING MORE CROP LAND HAS CONTINUED. A GREATER PROPORTION OF DAIRYMEN NOW HAVE ENOUGH ACREAGE FOR THEIR PRESENT SIZED HERDS.

INVESTMENT - TOTAL INVESTMENT PER FARM HAS INCREASED \$11,294, OR ALMOST \$3800 A YEAR. CHANGES IN LAND VALUES, A RESULT OF CLEARING AND BRINGING MORE ACRES UNDER CULTIVATION, ACCOUNTED FOR PART OF THIS INCREASE. HOWEVER, MOST OF THE INCREASE IS DUE TO ADDITIONAL INVESTMENT IN COWS, MACHINERY, EQUIPMENT AND BUILDINGS. THIS ADDITIONAL INVESTMENT OF \$11,294 WAS ACCOMPANIED BY AN INCREASE IN THE OWNER'S EQUITY OF \$3,351 AND AN INCREASE IN INDEBTEDNESS OF \$7,943. THIS PLAINLY INDICATES MOST OF THE INCREASE IN INVESTMENT MANAGED WAS ACHIEVED BY THE FARMER GOING FURTHER IN DEBT. THE DECREASE IN MACHINERY INVESTMENT PER ACRE OF CROP LAND IS LARGELY ATTRIBUTABLE TO AN INCREASE IN RENTED ACRES OF CROP LAND.

DURING THESE YEARS, A TYPICAL DAIRYMAN'S EQUITY IN HIS COOPERATIVE ASSOCIATION HAS INCREASED \$4,000 TO \$6,000 A YEAR. THIS INVESTMENT OF THE PRODUCER SHOULD NOT BE IGNORED THOUGH IT IS IN THE FORM OF NON-INTEREST BEARING, DEFERRED PATRONAGE REFUNDS OR PRODUCT RETAINS. THESE ASSETS ARE NOT INCLUDED IN THE FARM INVESTMENT SHOWN IN THIS REPORT. FOR THE DAIRYMAN TO FINANCE HIS SHARE OF THE INVESTMENT NECESSARY FOR A COOPERATIVE TO PROVIDE FARM SUPPLIES, PROCESSING, AND TO DISTRIBUTE HIS PRODUCTS REQUIRES THE EQUIVALENT OF \$30,000 TO \$50,000 PER FARM.

GROSS CASH INCOME - THE SALE OF MILK HAS CONSISTANTLY ACCOUNTED FOR 90 PER CENT OR MORE OF THE GROSS CASH INCOME OF THESE FARMS. SALE OF POTATOES, FEED AND DAIRY BEEF PLUS CUSTOM AND OFF-FARM WORK ACCOUNT FOR MOST OF THE REMAINING 10 PER CENT. WHILE THERE HAS BEEN SOME FLUCTUATION IN THE AVERAGE PRICE RECEIVED FOR MILK SOLD, THE GROSS INCOME HAS SHOWN A STEADY INCREASE DUE TO MORE COWS BEING MILKED AND HIGHER PRODUCTION PER COW. GROSS CASH INCOME INCREASED ABOUT \$6,700 FOR TYPICAL FARMERS WHILE NET INCOME INCREASED ONLY \$1,700 BETWEEN 1957 AND 1959.

COST OF PRODUCTION - THE COST OF PRODUCING A HUNDRED POUNDS OF MILK DROPPED BY \$1.00 FROM 1957 TO 1958, BUT THEN ROSE 41¢ IN 1959. THIS NET REDUCTION OF 59¢ IS A RESULT OF LOWER FEED COSTS DURING THE PERIOD. THERE WAS REDUCTION IN COSTS OF BOTH PURCHASED AND HOME-GROWN FEEDS WITH THE LARGEST REDUCTION BEING IN THE LATTER. OFF-SETTING THE REDUCTION IN FEED COSTS WAS A NET INCREASE OF 20¢ ON NON-FEED COSTS. ONE OF THE MAJOR ITEMS OF THE NON-FEED COSTS WAS HIRED LABOR. IN 1957 HIRED LABOR COSTS WERE \$1.41 PER HUNDREDWEIGHT, DROPPING TO 92¢ IN 1958 AND THEN RISING TO \$1.34 IN 1959. THE RISE BETWEEN 1958 AND 1959 WAS CAUSED IN PART BY ADDITIONAL HIRED LABOR ON FOUR FARMS WHICH HAD EXPANDED BEYOND A ONE-MAN OPERATION BUT HAD NOT GROWN SUFFICIENTLY TO FULLY SUPPORT A YEAR-ROUND HIRED MAN. CASH COSTS DO NOT INCLUDE ANY PAYMENT TO THE OPERATOR FOR HIS AND HIS FAMILY'S LABOR OR ANY RETURN ON HIS EQUITY IN THE FARM.

NET CASH INCOME - THE \$1,700 A YEAR INCREASE IN NET CASH INCOME DURING THE THREE YEAR PERIOD IS A RESULT OF BOTH INCREASED VOLUME PER FARM AND LOWER COST PER POUND OF MILK. NET FARM INCOME IS WHAT A FARMER HAS LEFT FOR FAMILY LIVING EXPENSE, DEBT PAYMENT AND REINVESTMENT. IT IS INTERESTING TO NOTE THERE HAS BEEN LITTLE VARIATION IN THE NET INCOME PER COW BASED ON THE AVERAGE NUMBER OF COWS MILKED BUT BECAUSE THE FARMERS HAVE BEEN ABLE TO MILK A HIGHER PERCENTAGE OF THE COWS IN THE HERD, THE INCOME PER COW HAS INCREASED BY \$44.

DEBT REPAYMENT - THE QUESTION AS TO HOW MUCH DEBT A DAIRY FARM CAN CARRY IS OFTEN POSED. A RULE OF THUMB USED BY LENDING AGENCIES IS THAT A FARM OF ADEQUATE SIZE TO SUPPORT AN OPERATOR AND HIS FAMILY CAN USUALLY SAFELY CARRY A DEBT LOAD OF BETWEEN ONE-THIRD AND ONE-HALF OF THE VALUE OF THE TOTAL INVESTMENT. LARGER WELL-MANAGED FARMS ON BETTER SOILS CAN OFTEN SAFELY CARRY AN EVEN LARGER INDEBTEDNESS. SELDOM WILL ANY CREDIT AGENCY LEND AS MUCH AS THREE-FOURTHS OF THE ASSESSED MARKET VALUE OF A FARM.

BASED ON INFORMATION IN THIS STUDY HERE ARE TWO EXAMPLES OF WHAT A DAIRY FARMER MIGHT REASONABLY BE EXPECTED TO CARRY IN THE WAY OF A DEBT LOAD DEPENDING ON THE SIZE OF HIS OPERATION:

	FARM SIZE	
	20 cows	40 cows
NET CASH INCOME AT \$300 PER COW	\$6,000	\$12,000
LESS FAMILY LIVING EXPENSES	4,000	4,000
DEPRECIATION (BUILDING, MACHINERY, EQUIPMENT AND COWS)	1,500	2,500
MONEY LEFT THAT COULD BE APPLIED		
ANNUALLY AGAINST DEBT	500	5,500
PAYMENTS PER COW	25	138

THIS INDICATES THAT IN 20 YEARS A 20 COW DAIRY MIGHT BE ABLE TO PAY OFF A \$10,000 DEBT. IN THE SAME PERIOD A 40 COW DAIRY MIGHT PAY OFF \$40,000 TO \$60,000. A 50¢ A HUNDRED DROP IN FARM MILK PRICES COULD MORE THAN OFF-SET THE DEBT PAYING ABILITY OF THE FARMER WITH A HERD OF 20 COWS. DEBT REPAYMENT ABILITY ALSO DEPENDS UPON PERSONAL INCOME TAXES AND OTHER FACTORS THAT MUST BE CONSIDERED BUT ARE ALMOST IMPOSSIBLE TO FIGURE EXCEPT ON AN INDIVIDUAL BASIS.

FARM BUSINESS ANALYSIS WILL PAY - A TYPICAL DAIRYMAN WORKS LONG HOURS AND OFTEN IS BEHIND IN HIS SCHEDULE OF FIELD AND FARM WORK. NORMALLY HE HAS NEVER RECEIVED ANY SPECIAL TRAINING IN HOW TO KEEP, ANALYZE AND USE FARM BUSINESS RECORDS TO AN ADVANTAGE. OFTEN HE MAY NOT CARE FOR RECORD KEEPING OR THINKS IT NOT IMPORTANT ENOUGH TO DO MORE THAN THE MINIMUM RECORD KEEPING REQUIRED FOR INCOME TAX PURPOSES. USUALLY HE IS SO CLOSE TO MANY OF HIS MANAGEMENT PROBLEMS THAT HE CANNOT BACK AWAY AND TAKE A GOOD LOOK AT THEM.

IN MOST STATES SPECIAL ASSISTANCE WITH THIS TYPE OF PROBLEM IS AVAILABLE FROM AGRICULTURAL ECONOMISTS WITH THE STATE EXPERIMENT STATIONS AND EXTENSION SERVICES. IT IS THE MAJOR OBJECTIVE OF THE RESEARCH UNDER WHICH THIS REPORT WAS DONE TO PROVIDE THE TECHNICAL EXPERIENCE AND LOCAL FARM DATA NECESSARY TO PROVIDE ALASKA FARMERS WITH A FARM ADVISORY SERVICE IN FARM BUSINESS ANALYSIS AND MANAGEMENT. THE NEED FOR GREATER EMPHASIS IN THIS AREA OF ASSISTANCE TO ALASKAN FARMERS IS ALSO CLEARLY INDICATED IN "PROGRESS REPORT FOR ALASKA'S DAIRYMEN" SPECIAL REPORT NUMBER 9, FEBRUARY 1960 BY WILLIAM J. SWEETMAN.

IN SUMMARY - TO CUT THE COSTS THAT REDUCE THE FARMER'S DAIRY PROFITS HE MUST: GET MORE MILK PER CROP ACRE, PER COW AND PER MAN. A DAIRY FARMER CAN EASILY PAY MORE FOR THE FEED HE RAISES THAN IT COSTS TO BUY. IT SHOULD COST LESS TO RAISE IF HE HAS REASONABLY GOOD SOIL AND IF HE USES GOOD CROPPING AND FEEDING PRACTICES. COSTS OF FEED PRODUCTION AND PROFITS PER COW CAN ONLY BE DETERMINED BY KEEPING A COMPLETE SET OF ACCOUNTS, INVENTORY AS WELL AS INCOME AND EXPENSE RECORDS. TWENTY-FIVE OR MORE COWS ON THE PRODUCTION LINE PRODUCING OVER 10,000 POUNDS A YEAR ARE REQUIRED TO CARRY A SIZEABLE DEBT LOAD AND TO PROVIDE THE FARM FAMILY WITH A REASONABLE INCOME.

THREE YEAR FARM BUSINESS SUMMARY
ON FIFTEEN MATANUSKA VALLEY DAIRY FARMS
1957 - 1959

PRODUCTION	AVERAGE OF ALL FARMS			
	1957	1958	1959	
PER FARM	POUNDS	170,119	211,126	228,318
COWS (2 YEARS OLD & OVER IN HERD).	NUMBER	21	24	25
PER COW	POUNDS	8,469	8,550	9,159
AVERAGE COWS MILKED DURING YEAR.	NUMBER	15	19	21
PER COW	POUNDS	10,901	11,170	11,009
FARM INVESTMENT				
TOTAL	DOLLARS	55,009	58,735	66,303
OWNER'S EQUITY	DOLLARS	35,442	37,155	38,793
INDEBTEDNESS	DOLLARS	19,567	21,580	27,510
RATIO INDEBTEDNESS TO EQUITY	PER CENT	38.0	36.7	43.7
INTEREST PAID.	DOLLARS	1,004	1,182	1,334
MACHINERY:	DOLLARS	9,861	10,378	10,649
PER CROP ACRE	DOLLARS	118	124	71
PER COW: (2 YEARS & OVER IN HERD).	DOLLARS	2,855	2,468	2,815
(AVERAGE NUMBER MILKED)	DOLLARS	3,811	3,108	3,430
GROSS CASH INCOME				
TOTAL MILK SALES	DOLLARS	17,799	20,562	24,508
OTHER FARM INCOME	DOLLARS	1,970	1,394	1,984
TOTAL FARM INCOME	DOLLARS	19,770	21,956	26,492
AVERAGE PRICE FOR MILK SOLD (CWT.)	DOLLARS	10.79	10.25	10.95
CASH COSTS OF MILK PRODUCED				
TOTAL PER CWT.	DOLLARS	8.26	7.26	7.67
NON-FEED COST PER CWT.	DOLLARS	2.71	2.44	2.91
FEED COST PER CWT.	DOLLARS	5.55	4.82	4.76
FOR FEED PURCHASED PER CWT..	DOLLARS	2.55	2.29	2.19
FOR FEED RAISED PER CWT.	DOLLARS	3.00	2.53	2.57
PER COW IN HERD.	DOLLARS	750	661	721
PER COW IN PROD. (AVE. NO. MILKED)	DOLLARS	1,015	809	867
NET CASH INCOME				
PER FARM	DOLLARS	5,819	7,444	7,523
PER COW (2 YEARS OLD & OVER).	DOLLARS	277	313	321
PER COW (AVE. NO. MILKED)	DOLLARS	388	394	389

Faint, illegible text, possibly bleed-through from the reverse side of the page. The text is too light to transcribe accurately.