REPORT NO. 188

EVALUATION OF LIVESTOCK PHASE OF STANDING ROCK REHABILITATION PROGRAM, NORTH AND SOUTH DAKOTA

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
Missouri River Basin Investigations Project
Billings, Montana
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FOREWORD

This report is the result of a study undertaken to evaluate the Standing Rock Sioux Tribe's livestock phase of its rehabilitation program. A period of correspondence and conferences between MRBI and Area, Agency and Tribal personnel resulted in the consensus of opinion that such a study would have value in increasing the effectiveness of this program. Forms and interview schedules were prepared and data collection was begun in the fall of 1965.

Our thanks to Dr. Walter U. Fuhriman who was primarily responsible for initiating this study, and to Mr. Clarence S. Runyan who had a part in initiating the study and who took most of the interviews and had the major responsibility in the collection and initial tabulation of data. Both of these men have now retired. Since their retirement, Mr. L. Kent Hamilton has been assigned the responsibility for completion of the study. He has been assisted by several of the MRBI staff in tabulating the data and Messrs. Marion Hedegaard and Arne Degn have given invaluable assistance in analyzing data and in writing and editing the report.

We acknowledge and appreciate the cooperation of the Tribal and Agency officials and their staffs who gave their assistance in the collection and interpretation of data. We also appreciate the cooperation of the livestock operators for the information given in the interviews.

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Billings, Montana

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SUMMARY

This study is an evaluation of the livestock phase of the Standing Rock Rehabilitation Program as it was established to assist tribal members attain a self supporting income through self-employment. This evaluation is approached on the basis that achievement of the goal will be reflected in the progress of the individual livestock operators assisted through the program.1/ No attempt has been made to evaluate the program's financial condition, nor its administration, except as it relates to enforcement of contracts.

Progress of operators has been measured in three areas: (1) whether or not they have continued with the program; (2) change in the operator's net worth from the time he made application to come into the program until the close of 1965; and (3) a measure of the operator's income. Information was available on income only for the year 1965.

The program was established with three options, two of which were to be administered by the tribe on a cattle lease basis, the third was an advancement to the regular tribal Revolving Credit Program administered by the Bureau of Indian Affairs through which cash loans are made.

The first five years of the program involved 51 participants. Two of these participants had shown sufficient managerial ability and had built sufficient equity in their operation to be transferred to option three. Fifteen of the participants had been closed out or had voluntarily left the program. These fifteen participants had, as of December 31, 1965, an average indebtedness of $3,137 to the tribe resulting from their program participation. Thirty-four operators remained in the program as of December 31, 1965; four of these were new operators who entered the program in 1965 and one additional operator was not available for interview. The remaining 29 operators are included in the net worth and income evaluation.

The net worth of 11 operators had increased in excess of $2,000, averaging $6,587 and ranging from $2,525 to $16,273 during the time they participated in the program. These increases would not likely have been so great had the operators not received an average of approximately $5,500 each from family plan and general welfare assistance during this same period. Five operators had increased net worth of $2,000 or less, averaging $1,396 and ranging from $735 to $1,873. These families received an average of approximately $3,000 from family plan and welfare assistance. Figures reported for the other 13 operators show a decreased net worth averaging $1,188 and ranging from $615 to $8,576. This group received an average of approximately $3,700 from family plan and welfare assistance during this same period.

1/ Program as used here and throughout the remainder of this report refers only to the livestock phase of the Rehabilitation Program unless otherwise specifically designated.

Net ranch income is defined as the return to the operator's land and capital equity and to his and his family's labor contribution. It is the amount of income available for family living, for payment of debts, or for additional investment. The 1965 net ranch income of eight of the 29 operators was a negative figure, averaging minus $763; 13 operators had between $0 and $1,000 net ranch income, averaging $470; five had between $1,000 and $1,999, averaging $1,493; and only three operators had net ranch income over $2,000, averaging $4,358. Most of the operators are dependent on non-ranch income. This includes wages, lease income, and income from welfare, social security, or pensions. Non-ranch income for 1965 averaged $1,750 per operator compared to $707 average net ranch income.

The preceding figures indicate the lack of significant progress toward the program goal. Many factors have contributed to this lack of progress, the most important factors as indicated by this evaluation being: (1) lack of enthusiastic operator interest. One operator expressed it this way, "Why should I worry about these cattle - I'm only taking care of them for the Tribe anyway." While other operators weren't so outspoken about it, their attitudes indicated this same feeling. This feeling is further emphasized by the second factor. (2) Poor ranch management as evidenced by low calf crops, high death losses, low quantity and quality of winter feed harvested, failure to provide at least minimal artificial shelter for calving in severe weather, lack of time spent at the ranching operation, and low income. (3) Details of the program and contracts have not been adhered to. Operators have not retained sufficient heifers to begin replacing leased cows. Operators have unnecessary expense because their hay supply is either inadequate or inaccessible during times of severe weather and it becomes necessary to buy additional cake. (4) Insufficient numbers of cattle were issued. It is noted that only 29 percent of operators who had issues of less than 90 head of cows had increased their net worth during their participation in the program, while 64 percent of operators with over 90 head showed an increase. None of the operators with less than 90 head had sufficient net ranch income to be considered self supporting.

CONCLUSION

Before pointing out the conclusions drawn from this evaluation it is important that acknowledgement and credit be given to those people who developed this program through their sincere interest in achieving some worthwhile long-range improvement in the economic position of tribal members through the use of a part of the tribal assets. In the case of a few families this has been accomplished. The tribal leaders have demonstrated their continued interest in this goal through their support of this evaluation. Those who instituted this program were looking ahead at what they felt could be achieved. It is not the intent of this evaluation to criticize their planning and work, but to use the experience gained through the program to point out changes which experience has indicated may help to achieve the program goals.

From the results of this research effort it can be concluded that little progress has been made toward making the tribal members self-supporting through the program. If the initial goals of the program are to be met, then the study inferences would indicate that the following points should be given particular attention.

I. Management and husbandry practices must be improved.

(A) Lack of interest in caring for livestock because of the attitude that the operator doesn't own the cattle must be overcome through training that will help the operator to understand that he can eventually gain ownership if he will follow the program procedures.

(B) Operators must be convinced that other interests must be subordinated to the cattle operation and time away from the operation must be minimized especially during the calving season and similar peak periods of labor and management requirements.

(C) Death loss must be reduced and calf crops increased. These measures could be accomplished with little additional capital investment through employment of innovative management at ranch and program levels. Brush sheds or windbreaks could be built or improved at ranch headquarters for protection during severe storms or inclement calving weather. Some operators need winter watering facilities and others may find it feasible to move ranch headquarters to a more advantageous location.

(D) Adequate feed must be provided at all times to maintain a healthy breeding herd. To produce large healthy calves, adequate amounts of good quality hay must be properly stored and readily accessible to feeding areas. If the hay supply is lacking in quality, then balancing supplements should be fed.

II. Greater care must be exercised in administering the program.

(A) Program administrators must be willing to support the program against political and social pressures. In this regard it may be desirable to have some technically qualified committeemen who are not tribal members.

(B) The less progressive operators should be closed out and their resource used to expand the more progressive operators. It is evident that several of the less progressive operators are doing neither themselves nor the tribe any economic good.

An operator if given a minimum of 150 head of breeding stock should prove himself in one or two years. If he has not made measurable progress by his second year, his situation should be reviewed carefully. Definite steps should be taken to remedy any problems that have arisen or the operator should be removed from the program. No attempt has been made in this study to determine the financial feasibility of such a program adjustment.

III. Program conditions and lease contracts must be rigidly adhered to and enforced.

(A) Operators must be carefully selected according to the terms of the program.

(B) Operators who do not abide by the terms of the lease contract should be promptly closed out to avoid economic loss to the tribe and loss of morale and program support among operators who are abiding by the terms of their agreement. Specific repayment and replacement terms must be agreed upon and enforced.

INTRODUCTION

The Reservation Setting

The Standing Rock Reservation straddles the boundary of North and South Dakota, is located in Corson County, South Dakota, and Sioux County, North Dakota, and is bordered on the east by the Oahe Reservoir of the Missouri River and on the north by the Cannonball River.

Educational, health, and minimal shopping facilities are available at the BIA and Tribal headquarters town of Fort Yates, North Dakota. Other small communities in the reservation provide very minimal services and shopping facilities. Bismarck, North Dakota, which lies about 50 miles north of the reservation, is the nearest primary trade center. McLaughlin, McIntosh, and Mobridge, South Dakota are the major secondary trading centers in the immediate reservation area and are the towns in which the reservation residents conduct most of their shopping and trading.

The reservation is served by the main line of the Milwaukee Railway, by U. S. Highway 12, and several secondary highways constructed and maintained by the States of North and South Dakota.

The reservation resident Indian population includes 880 Standing Rock families with a total population of approximately 4,250 of which the Hunkpapa band of the Teton Sioux is the predominant ethnic group. The average level of education for resident household heads is approximately grade eight. They have historically been dependent upon land lease income, on wage and self-employed income from agricultural occupations, and from public welfare assistance. In 1965 an estimated 30 percent of the resident Indian families had annual cash incomes below $1,000; 78 percent had cash incomes below $3,000.

The major capital resource of the Standing Rock Indians is land held in trust for them by the United States Government. The reservation contains approximately 870,000 acres of trust lands of which nearly 30 percent is owned by the tribe. Approximately 90 percent of the Indian trust land is suitable only for grazing purposes, therefore the predominant land use is for livestock operations (essentially all cattle).

The Establishment of the Program

Public Law 85-915 approved by the 85th Congress in 1958, authorized the sum of $5,251,553 to be paid to the Standing Rock Sioux Tribe and its members for damages incurred from the taking of the land for the Oahe Reservoir, and $6,960,000 for the rehabilitation of tribal members. The rehabilitation funds were deposited in the U. S. Treasury to the credit of the Standing Rock Sioux Tribe and drew four percent interest until expended. An overall rehabilitation plan was established by the tribe for these funds, and the farm livestock phase of the program, funded with $1,000,000, was initiated in 1960 with the first cattle being issued in 1961.

Purpose and Content of the Program

The purpose of the Standing Rock Cattle Program as expressed in the written program was to assist Standing Rock Indians who had a reasonable potential as livestock operators, but were unable to obtain adequate production or investment credit from other sources, to become self-sufficient cattle operators, and to use Indian resources to accomplish this end. The general plan of the program was for the tribe to lease good quality beef breeding stock to approved applicants on a calf crop share basis for a limited number of years and to provide cash loans for production credit and limited capital investment in machinery, stock water development, and construction of fences.

The program was designed to minimize the need for capital investment by the potential operators and provided specific risk minimizing advantages to new operators under three program options. A general manager was hired to administer the overall rehabilitation program and three heads, or supervisors, were employed to provide guidance for the new operators in ranch management practices. In addition to providing all initial breeding stock, the program assumed all losses of leased breeding stock during the period of the cattle crop share lease, provided sufficient number of good quality bulls, provided limited veterinary services, and also organized marketing procedures designed to minimize marketing expense and maximize returns.

The eligibility of candidates for the program was based on the applicant's ability to obtain a sufficient land base through lease or ownership, and on his potential ability to apply adequate husbandry and management practices. The tribal program management and BIA personnel assisted the operators in procuring range units adequate for their prospective herds. Fifty-one Standing Rock Indians participated in the program between 1961 and the end of 1965.

Option one of the livestock program was designed to accomodate those Standing Rock Indians who were desirous of entering the cattle program, but who had reached the age when they would be considered capable of handling breeding herds of no more than 30 head. Since the inception of this program, only two operators had been engaged in this option both of whom had been in the program four or more years and were currently in the program in December 1965. Under this option the Indian operator was leased 30 head of cows, or bred heifers, was eligible for a cash loan of no more than $1,000, and was to receive 60 percent of the receipts of the annual calf crop. No specific provisions were in the written program for operators to obtain cattle in his own name for an eventual phase-out of the crop share program.

Option two provided for the tribal issuance of 60 or 90 head of good quality beef cows on a calf crop share basis, the actual number being limited by the managerial ability of the operator and his available land resources. Of the forty-nine Standing Rock Indians who have participated in this option since the program's inception, 32 were in the program at the end of 1965; fifteen have had their operations liquidated, and two have been transferred to other programs. As of December 1965, five operators were on a 60 head lease of whom all had been in the program four or more years, and 27 were on a 90 head lease of whom 19 had been in the program for four or more years. This option provided for total cash operating loans not to exceed $6,000; the operators received 80 percent of all calf sale receipts and included a heifer retention provision so that the operator would eventually own his own breeding herd. For those operators who had a cow or heifer lease of 60 head, this retention program was to be initiated at such time that beginning with the operator's seventh program year, the lease of tribal cattle would be reduced ten head per year with the operator being required to retain sufficient owned cattle to maintain a breeding herd of 60 head. Those operators who were leased 90 head were to initiate a similar program beginning with the fourth year.

Option three provided for the transfer of operators to the revolving credit program administered by the Bureau of Indian Affairs after they had demonstrated sufficient managerial competence and economic progress to make them eligible. At the end of 1965, two operators who had entered the tribal cattle program under the second option had made this transfer.

The Sample Population

The sample includes 29 of the 34 operators in the program December 31, 1965. One operator had been in the program a sufficient length of time but was not available for interview, the other four operators entered the program in 1965. All 29 operators had two or more years of program experience. These included 17 who were three-fourths or more Indian blood and 12 who were less than three-fourths, or had a non-Indian spouse. Their ages in 1965 averaged 44.3 years (median 45), of whom five were under 30 years of age and four were 60 years of age or over. The age of the high-bloods averaged 42.2 years (median 38), and for others, 47.3 (median 47.5).

The family size ranged from one to 11 persons and averaged 3.9. Those operators between 30 and 60 years of age had an average of 4.4 persons per family compared to 3.2 for the under 30 age group and 2.0 for the 60 years and over age group. Nine of the operators had families of five or more persons, while 11 had families of two or less. Seven of the operators had less than an eighth grade education, seven had completed the eighth grade and 13 had one to four years of high school training. The years of education was not reported for the other two operators.

Eighteen of the 29 operators had previous ranch experience as ranch-hands or as very small operators prior to their entering the program, with the remainder having either very limited work experience or having experience in non-agricultural occupations only. Four of the 18 had five years or less of ranch experience, five had five to 15 years of experience, and nine had over 15 years of experience. No relationship between years of experience and progress under the program was evidenced by the analysis.

Objective and Procedures

The Study Objective is to evaluate progress made by the operators in the livestock phase of the Standing Rock Rehabilitation Program toward attaining a self-supporting status through self-employment.

Procedures - The stated program objective is to assist tribal members to develop their capabilities and attain a self-supporting income through self-employment. Even though the portion of the program goal relative to the development of personal capabilities defies direct quantification and evaluation, it was possible to measure net worth change and income levels as a method of evaluating the program's success. These economic measures are indicators of operator capability development as well as measures of self-support through self-employment.

Program Evaluation

The program effectiveness can be evaluated by looking at the progress made by the 29 families as they have used the 72,831 acres of land and the tribe's livestock. This analysis uses the change in the operator's net worth between his entrance in the program and December 31, 1965 as a measure of his progress. By this measure there are 16 operators progressing and 13 who are not. The analysis is made primarily on the basis of these two groups and in order to avoid the frequent repetition of "increased net worth group" and "decreased net worth group", they will be referred to by letter. The letter "P" will be used to refer to the progressive or increased net worth group, and "N" will be used to refer to the non-progressive or decreased net worth group. The "P" group came into the program with net worth averaging $3,443 and closed 1965 with net worth averaging $8,408. This is an average increase of $4,965 per operator or $1,073 per operator per year. The "N" group had net worth upon entering the program of $4,472. This group had an average closing net worth of $1,822. This is an average net worth decrease of $2,650 or $556 per operator per year.

Thirteen of the operators in the "P" group had been in the program for five years, one for four years, one for three years, and one for two years. Seven (43.7%) of the "P" group operators were three-fourths or more Indian blood and nine (56.3%) were less than three-fourths Indian blood or were married to a non-Indian spouse. They averaged two years older than the "N" group, 45.1 compared to 43.4 years, and had one year more education, 9.3 compared to 8.2 years.

Eleven operators in the "N" group had been in the program for five years, one for four years and one for three years. Ten (76.9%) of the "N" group operators were three-fourths or more Indian blood and three (23.1%) were less than three-fourths Indian blood.

Resources Used

Part of the intent of the program was to encourage Indian people to make use of their own resources in an effort to increase the economic gain from these resources. Resources used in the program include the human resource, 29 operators and their families; 72,831 acres of land resource including each operator's range unit; and the financial resources of the tribe converted to technical assistance, supervision, and especially to leased cattle.

The human resource included 29 families, five of which were composed of single individuals; six, husband and wife only; and 18 families with from one to nine children. The average family size was 3.9 persons. The heads of 12 of these families were less than three-fourths Indian blood or had a non-Indian spouse. The heads of the other 17 operator families were three-fourths or more Indian blood. The average age of all the family heads interviewed was 44.3 years in 1965.

The land resource consisted of 72,831 acres of range land, of which 68,978 acres were permitted or leased, 2,888 were owned, and 965 acres were in standard assignments. Hay was reportedly harvested from 5,603 acres of this land. Land resources averaged 2,511 acres per ranch ranging from 1,060 to 4,707 acres. The average acreages per ranch were 33 acres (1.3%) standard assignment, 100 acres (4.0%) of owned range land, and 2,378 acres (94.7%) other range including leased and possibly some free use land. From this 2,511 acres there was an average of 193 acres on which operators reported cutting hay. There was a charge of $1.00 per acre in addition to grazing fees for acreage used for hay cutting.

Operators in the "P" group reported an average of 2,688 acres compared to 2,294 acres for the "N" group. Figured on a per cow unit basis there is practically no difference in the two groups, the averages being 30.7 acres per head for the "P" group and 30.1 acres per head for the "N" group. The variation in acres per head is great among individual operators, ranging from 15 to 63 acres per head. The difference in carrying capacity accounts for much of this variation, but there was evidence that some of the variation is brought about by operators not stocking at the recommended rate.

The 29 operators reported an average of 193 acres of hay harvested, which under normal yield and quality should provide adequate hay for wintering their stock. However, much of the hay harvested appeared to be poorly handled, improperly stored and of poor quality.

The livestock resource used as a base in the change in net worth analysis was the 1965 closing inventory made up of 2,390 cows, 86 two-year old heifers, 165 yearling heifers, 78 bulls, 2 two-year old steers, 6 milk cows, and 119 horses, with a total estimated value of $533,800. The "P" group reported a 1965 average closing inventory of 2.8 bulls, 87.5 cows, 4.5 two-year old heifers, 8.1 yearling heifers, 6.0 horses and 1.0 head of other cattle, compared with 2.5 bulls, 76.2 cows, 1.1 two-year old heifers, 2.6 yearling heifers, 4.0 horses, and .1 head of other cattle for the "N" group.

The livestock base for the 1965 income analysis was the January 1, 1965 inventory made up of 2,392 cows, 77 bulls, 106 two-year old heifers, 161 yearling heifers, 5 steers, 6 milk cows, and 110 horses. Two operators had 30 head of breeding cows, five had 60 head, 18 had 90 head, and four had 94 or more, with an average of 103 head. The "P" group reported a 1965 average beginning inventory of 2.8 bulls, 87.6 cows, 5.1 two-year old heifers, 7.9 yearling heifers, 6.0 horses, and 1.0 head of other cattle compared to 2.5 bulls, 76.2 cows, 1.8 two-year old heifers, 2.6 yearling heifers, 3.8 horses, and .3 head of other cattle for the "N" group. The 29 operators had an average of 82.5 head of breeding cows ranging from 30 to 110 head at the beginning of 1965. The "P" group averaged 87.6 head ranging from 30 to 110 head, and the "N" group averaged 76.2 head ranging from 30 to 90 head.

The closing cattle inventory for 1965 showed that in addition to their leased cattle, the "P" operators had an average of 6.9 cows, 4.5 two-year old heifers, and 8.1 yearling heifers. In addition to their leased cattle the "N" group had no cows and an average of 1.1 two-year old heifers and 2.6 yearling heifers. Neither of the groups have retained sufficient heifers to take care of a normal replacement nor to carry through with the phase-out part of the program. Only two operators (13%) of the "P" group had less than 90 head of cows, while five operators (38%) of those in the "N" group had less than 90 head of breeding cows. Sixty-four percent of the operators with 90 or more breeding cows were in the "P" group. Only 29 percent of the operators with less than 90 head of breeding cows were in this group.

The program has served to utilize only a relatively small percentage of the total reservation resources. It must be remembered, however, that these resources would not likely have been put to use by tribal members had the program not been in existence.

Husbandry Practices

The livestock husbandry practices employed by the program operators are generally those practiced on extensive open range type operations. These practices are inadequate for the relatively small subsistence type operations managed by the program operators. Although this study was not designed to make a management analysis it was apparent that a number of the practices employed had an inhibiting effect on the operator's economic progress. These husbandry limitations fall into five main categories:

(1) Failure to provide adequate hay and/or protein supplement to their wintered herd. The data available indicates that approximately 75 percent of the 29 operators did not harvest sufficient hay in 1965, harvested it in such a manner that it was not entirely usable, or did not provide sufficient protein supplement to insure adequate nutrition for their cow herds.

(2) Inadequate machinery and/or use of labor to provide sufficient harvested forage and care for their cattle. Approximately 57 percent of the operators had inadequate machinery in proportion to the ranch labor supply, had insufficient labor for their ranch operations, did not use their labor resources effectively, or had a combination of these factors.

(3) Adequate shelter was not provided for the cattle. Approximately 59 percent either had inadequate cattle shelter or such shelter was located disadvantageously to ranch headquarters thereby eliminating the possibility for the daily care that is essential to good husbandry. None of the operators had adequate constructed shelter at their ranch headquarters for calving during inclement weather.

(4) Inadequate stock water facilities for good year-round livestock husbandry. Although it appeared that all of the operators had approximately adequate range stock water facilities for spring, summer, and fall grazing, 20 percent had no stock water near their headquarters adequate for reasonable winter husbandry practices.

(5) Inadequate time spent on the ranch to use proper husbandry and management practices. Thirty-four percent of the operators had other employment or other interests which limited the amount of time for productive purposes on the ranch.

In an overall analysis of these five management and husbandry practices, eight of the 29 operators (28%) had such seriously deficient practices as to be considered extremely poor management risks under any type of cattle operation in the Northern Plains area. Eight others (28%) utilized such management practices as to be considered sub-marginal; ten (34%) would be considered marginal operators and utilized only the very minimal husbandry practices essential to range livestock operations; while only three (10%) used husbandry practices which could be considered acceptable for ranch livestock operations in the Northern Plains area.

These poor husbandry practices are reflected in (1) poorer calf crops - the average calf crop since entering the program averaged 66 percent for those operators using sub-marginal or deficient practices compared to 73 percent for the other operators; (2) a relatively high percentage of late calves among the poor operators - of the 16 operators using seriously deficient or sub-marginal practices, 12 sold 10 percent or more of their calves as late calves in 1964 and 1965. These late calves averaged over $15 less per head than those that sold during the early annual program calf sale, while none of the other operators sold more than 5 percent of their calves as late calves and these were sold for essentially the same price per head as those sold as early calves. It was not possible to make a specific causative analysis for this, but it is apparent that it is related to husbandry practices and the implications of breeding problems merit close program surveillance.

Since a number of the operators had substantial amounts of income from per capita payments, welfare assistance, land lease, and wages which had indeterminate subsidiary effects on changes in the net worth of the operator, relationships between husbandry practices and changes in net worth were not specific. Since the general husbandry practices employed by 90 percent of the operators were marginal or sub-marginal, specific relationships should not be expected, but this discussion points to the need for a general improvement of these practices.

Income and Expense

One of the stated purposes of the program was to enable tribal members with capabilities as ranchers to become self-supporting through self-employment. A look at the income and expenses of the program operators will indicate whether or not they are achieving this goal of self-support.

Data available was not adequate to make an income and expense analysis for more than the last operating year (1965). The 1965 data is sufficient to point to a few areas that may be causing the operators some difficulty. The 1965 average income and expense for the 29 operators in this analysis are shown in Table 1.

The average cash receipts per ranch for the 29 operators was $4,354 of which 98.9 percent was from livestock sales. Only two operators had ranch income from other than cattle sales, one of these sold some hay, the other used his ranch machinery to perform some custom ranch work.

Table 1. Average Ranch Income and Expense for 29 Program Operators and for "P" and "N" Groups

	All Ranches			"P" Group			"N" Group		
		Average Per Ranch	Average Per Cow		Average Per Ranch	Average Per Cow		Average Per Ranch	Average Per Cow
	%	$	$	%	$	$	%	$	$
Cash Income									
Livestock sales	98.9	4,306	52.21	98.1	4,662	53.20	100.0	3,868	50.79
Crop sales	.9	41	.50	1.6	75	.86	- -	- -	- -
Custom work	.2	7	.08	.3	13	.15	- -	- -	- -
Total Income	100.0	4,354	52.79	100.0	4,750	54.21	100.0	3,868	50.79
Cash Expenses									
Hired labor & custom work	3.5	130	1.58	4.1	170	1.94	2.4	80	1.06
Feed, seed & supplies	5.4	201	2.43	5.4	226	2.57	5.2	170	2.23
Cattle leases	22.7	866	10.50	22.2	923	10.53	24.3	797	10.46
Land rental & range fees	43.5	1,630	19.76	42.7	1,777	20.28	44.2	1,449	19.03
Gas, oil, repairs, & electric.	13.1	493	5.98	14.1	586	6.69	11.5	378	4.97
Building & fence repair	2.1	80	.97	2.6	107	1.22	1.5	48	.62
Other expenses	1.7	65	.79	2.0	83	.94	1.3	43	.57
Interest expense	8.0	298	3.62	6.9	286	3.26	9.6	313	4.11
Total Expenses	100.0	3,763	45.63	100.0	4,158	47.43	100.0	3,278	43.05
Net Cash Ranch Income		591	7.16		592	6.78		590	7.74
Perquisites		333	4.04		405	4.63		245	3.22
Livestock Inventory Adjustment		266	3.22		632	7.21		-184	-2.41
Depreciation		483	5.85		587	6.70		354	4.65
Net Ranch Income		707	8.57		1,042	11.92		297	3.90

The "P" group had an average cash ranch income of $4,750 compared to $3,868 for the "N" group. The number of calves sold and the prices received are the factors which account for most of the difference in the cash income for the two groups. The "P" group sold an average of 52.3 calves while the "N" group averaged only 46.7. There was little difference in the prices received by the groups in the annual program calf sale. This is a specially scheduled and advertised sale and the program operators sold approximately 91 percent of their calves at this sale (coincidentally, this percentage was the same for both groups). The price received for the nine percent of the calves sold by the individual operator, usually at public auction markets, was where the price difference showed up. The "P" group received an average of $71.55 per head compared to $59.77 per head for the "N" group. Other cash income averaging $87.50 per ranch was received by the "P" group for crop sales and custom work. The "N" group had cash ranch income from livestock sales only.

Small subsistence ranches very often receive a substantial contribution to their net ranch income as perquisites produced on the farm using family labor in the form of garden vegetables and dairy and poultry products. There was a distinct lack of this among these operators. One had poultry, two had milk cows, two reported gardens. This indicates either a lack of understanding of the importance of perquisites in the success of these small labor surplus ranch operations, or a lack of concern about making a success of these operations.

Another factor very pertinent to the ranch income is the calf crop. Figures reported in the annual report were used in calculating an average calf crop for each operator over the entire period he had been in the program. Seven operators (24.1%) had an average calf crop below 65 percent; thirteen operators (44.9%) had an average calf crop of 65 percent but less than 75 percent; nine, (31.0%) had an average calf crop of 75 percent or over. The 1965 calf crop for the 29 operators averaged 60.4 percent. A report by the United States Department of Agriculture on the Northern Plains operators shows a 1965 calf crop averaging 83 percent. The difference between the 83 percent for Northern Plains operators and 60 percent for Standing Rock operators no doubt made a substantial difference in income.

The average cash expense per ranch was $3,763. Three expense items accounted for over 75 percent of the ranch expense. Land rental and range fees averaged 43.5 percent; cattle leases averaged 22.7 percent; and ranch share of gas, oil, repairs, and electricity averaged 13.1 percent. The "P" group had a substantially higher cash expense than did the "N" group - comparison shows $47.43 and $43.05 per cow. The major items in the higher expense were hired labor and custom work and gas, oil and repairs. These comparisons can be seen in Table 1.

The program operators should have a distinct income advantage through their favorable calf crop lease rate when compared with off-reservation operators. The 20 percent lease is a very low rate for crop sharing cattle. This rate is more often around 40 percent and may be higher, especially when the lessor stands the death loss and veterinary expense. This lease advantage should be reflected in a higher net ranch income.

The program operators also have some advantage in paying reduced rates for tribal range land and in using relative's land free at times. The range fees paid averaged $19 per head based on the January 1, 1965 inventory of breeding cows. The variation in fees per head was from $13 to $29 per head.

The net ranch income for program operators is low, in spite of a low cash expense, because of an extremely low gross cash income resulting at least in part from inadequate husbandry and management practices previously discussed. The average net ranch income for all operators is $707. The "P" group averaged $1,042 and the "N" group, $297. Eight of the 29 operators had no net ranch income. They showed a negative net ranch income figure averaging minus $763. Thirteen operators had net ranch incomes of less than $1,000, averaging $470. Five operators had net ranch income between $1,000 and $1,999, averaging $1,493. The other three operators had net ranch incomes of $2,000 or over, averaging $4,358. It appears that only the latter three operators have a self-supporting income from self-employment.

Non-ranch income is an important part of the income of nearly all the program operators. Only two operators report no non-ranch income. Nine operators (31%) report net ranch income greater than non-ranch income. The average net ranch income for the 29 operators was $707, compared with $1,750 of non-ranch income. The figures show that net ranch income accounts for about 29 percent of the net family income (net family income equals net ranch income plus non-ranch income), for the 29 operators. Net ranch income equals 35 percent of the average net family income for the "P" group compared to 16 percent for the "N" group. The average net family income was $2,457, this was made up of 28.8 percent net farm income, 31.1 percent wages, 6.1 percent leases, and 34.0 percent welfare, pensions, and other.

The evidence presented by this study shows that the goal of the program is not being achieved in that operators are not becoming self-supporting through self-employment.

Investment

A net worth study of program operators as derived from investment and indebtedness comparisons is presented in the following three sections to further evaluate the success of the program.

The average investment for the year of application for each operator was $4,238, see Table 2. The average ranch investment, exclusive of tribal livestock investment, increased by $6,188 to $10,426 in 1965. This represents a 146 percent increase in total investment. The major change in the dollar investment was in buildings and improvements which showed an increase of $2,916. The investment in livestock showed the largest percentage increase at approximately 373 percent.

The December 1965 investment per operator, exclusive of tribal livestock investment, ranged from $2,860 to $27,215, averaging $10,426, with a median of $8,390. Those operators running 30 head of cows had an average investment of $5,405. Operators running 60 head of cows had an average investment of $9,112. The average investment for operators with 90 head of cows was $10,880, for operators with more than 90 head, $12,540.

Investment at the close of 1965 for the "P" group, exclusive of tribal cattle, averaged $13,175 ranging from $2,925 to $27,215. The "N" group averaged $7,042 ranging from $2,860 to $13,350. Investment on a per cow basis averaged $150.40 for the "P" group and $92.41 for the "N" group. The breakdown of investment for the "P" group shows buildings and improvements, 38.6 percent; livestock, 27.8 percent; vehicles and equipment, 19.3 percent; and land, 14.3 percent. This can be compared to the "N" group with land investment at 36.5 percent; buildings and improvements, 29.6 percent; vehicles and equipment, 21.8 percent; and livestock, 12.1 percent.

Table 2. Average Ranch Investment of 29 Program Operators

	Year of Application	1965	Change	
	dollars	dollars	dollars	percent
Buildings & improvements	825	3,741	+ 2,916	353.5
Vehicles & equipment	713	2,088	+ 1,375	192.8
Land 1/	2,191	2,191		
Livestock	509	2,406	+ 1,897	372.7
Total Investment	4,238	10,426 2/	6,188	146.0

1/ The land investment was assumed constant in this analysis to eliminate the appreciation in land values from the net worth change for the ranch operators.

2/ In addition to this individual operator investment, the tribe had an average of $16,393 invested in cattle per ranch. The tribe had a 61 percent interest in the $26,819 average combined investment.

Investment figures show operators of three-fourths or more Indian blood with 32.7 percent of their investment in land compared to 11.7 percent for operators of less than three-fourths Indian blood, or having a non-Indian spouse. The group with three-fourths or more Indian blood had a smaller percentage of their funds invested in buildings and improvements and in machinery and equipment than did the less than three-fourths blood group. The percentage figures for these items were: buildings and improvements, 31.9 percent compared to 39.1 percent; and machinery and equipment, 17.6 percent compared to 21.9 percent.

The investment, including the tribal cattle, averaged $26,819 per ranch ranging from $10,815 to $40,593. The tribe's investment in livestock averaged 61 percent of the overall ranch investment. The tribe's investment averaged 52 percent for two operators with 30 head of cows; 57 percent for five operators with 60 head of cows; 63 percent for 18 operators having 90 head of cows; and 59 percent for four operators averaging 103 head of cows.

The smaller ranches have the larger percentage investment in land, with the 30 head operators reporting 65 percent; 60 head operators, 58 percent; 90 head operators, 15 percent; and operators with over 90 head, 15 percent. Operators with over 90 head of cows show 52 percent of their investment in livestock.

The individual items of investment varied greatly among individual operators. Land investment averaged $2,191 ranging from $0 to $14,256. Livestock investment averaged $2,407 ranging from $0 to $10,000 and investment in vehicles and equipment showed the least variation averaging $2,088 with a range from $335 to $5,815.

Indebtedness

Indebtedness has increased substantially for the program operators since the time they made application to come into the program. Indebtedness reported at the time of application averaged $333 per operator, compared to $4,970 at the close of 1965. Eleven of the 29 operators were in debt at the time of application. Their indebtedness ranged from $39 to $4,215. In 1965 the indebtedness ranged from $700 to $11,306 and each operator was indebted. It was not possible with the data available to determine the creditors for the year of application, however, in 1965 approximately 79 percent of the indebtedness was to the tribe, 6 percent to banks, and 15 percent to other sources such as contracts to machinery dealers and debts to garages, service stations, etc.

The "P" group reported an average beginning indebtedness of $515 compared to $110 for the "N" group. Average indebtedness for the 29 program operators increased about 15 times. The "P" group's average indebtedness increased about nine times, to $4,767; and the "N" group's average indebtedness increased about 47 times, to $5,220.

Net Worth

Net worth indicates how an operator's assets or investments are accumulating in comparison to his accumulation of indebtedness or liabilities. Investment and indebtedness have been discussed in the preceding sections of this report noting the wide variations in both factors among the 29 operators. The average increase in net worth for all operators during the period that they have been in the program was $1,552. This is an average annual net worth accumulation of $318. Sixteen of the operators showed net worth increases averaging $4,965 and ranging from $735 to $16,273. On an annual basis the average would be $1,073 ranging from $147 to $3,255. Only two (12.5%) of these operators had less than 90 head of breeding cows. The two operators with less than 90 head had an average annual net worth increase of $489 compared to $1,093 for ten operators with 90 head and $1,291 for four operators with over 90 head. Thirteen operators showed decreases in net worth since coming into the program. The average decrease was $2,650 ranging from $615 to $8,576. On an annual basis the average decrease was $556 ranging from $123 to $1,715. Five (38.5%) of these operators had less than 90 head of breeding cows. The other eight were 90 head operators. The five operators with less than 90 head had an average annual net worth decrease of $524 compared to $575 for the eight 90 head operators.

The small accumulation of net worth indicates the slow progress being made by most of the program operators. The "P" group operators' net worth increase shows a relationship between size of herd and net worth accumulation. This leads to the conclusion that an increase in the number of cattle leased to an operator would enable him to progress more quickly to eligibility for transfer to option three.

Issue of Leased Cattle as it Relates to Success

While acknowledging that many factors have contributed to the success or lack of success of the livestock operators, it is interesting to note the relationship between the first year cattle issue and the progress of the operators. Thirty operators who made leases for 90 head of cows received at least a partial issue in the first year of the program. Eleven of the 30 received a full 90 head issue the first year and all of them stayed in the program at least four years. The program history of these 11 showed that one advanced to option three; seven showed increases in net worth averaging $6,575, only one of which was less than $2,000; one had a decreased net worth of $2,259; and two had been closed out. At least one of the two voluntarily quit the program because he felt that economically he could do better elsewhere. Nineteen of the 30 operators received less than the full issue the first year. The development of these 19 showed that one progressed to option three; five showed increases in net worth averaging $5,184, only one of which was less than $2,000; seven showed decreases in net worth averaging $2,749, with three of these between $0 and minus $2,000; and six were closed out of the program, two after one year, three after two years, and one after four years.

The two operators who had 90 head leases and were closed out the first year were issued only 30 head. Two of the three operators who were closed out after the second year had only 30 head issued, the other operator had gotten up to a full issue the second year. The operator who was closed out after four years had received a full issue the first year, however, this operator was progressing satisfactorily in the program but voluntarily quit because he could provide better for his family through other employment. There appears to be a direct relationship here between first year issue and progress in the program.

Comments and Opinions of Operators

There were at the time of this study, three tribally employed men who supervised and gave assistance to the operators. These men were called field aides. They were the subject of much discussion among the operators. Some of the operators were sharply critical of the field aides, some of them spoke very highly of the aides and their work. Nine of those interviewed felt that the qualifications of the field aides should be changed, three of them made the specific suggestion that they should have more experience with cattle. The others who felt that the qualifications should be changed had no specific suggestions.

The operators were asked if they had any suggestions for changes which they felt would improve the operation or management of the program. About half of the operators had some suggestions. Suggestions mentioned by more than one operator were: (1) that the lease rate should be reduced, 20 percent is too much to pay the tribe; (2) more cattle should be issued to an operator; (3) management should cooperate more in culling cows and in other such operator needs. Other suggestions include: having qualified operators participate in buying cattle; economic committee should visit operators; permit operators to sell calves individually rather than through program sale; buy better cattle; issue full quota at one time; let operators be responsible for losses; operators should not be made responsible for loss; increase cash amount permitted by loan; and change program to repayment-in-kind rather than leasing.

Nearly all of the operators named one of two factors as having caused them serious difficulties as they started their cattle program. These two factors were too few cattle and too small cash loan. The too few cattle factor is on the top of the list of present difficulties as stated by the operators.

Only three of the operators indicated specific changes in their operating practices since they came into the rehabilitation program. Two of these reported better fencing for grazing control. One had fenced a breeding pasture in an effort to increase the calf crop percentage.

Information concerning livestock operations is available to the operators from several sources, i.e., Tribal Field Aides, State Extension Agent, Bureau of Indian Affairs, Tribal Officials, radio, publications, and neighbors. The operators were asked to rate these sources 1, 2, and 3, according to their importance as a source of information to program operators. Neighbors as a source of information appeared in the top three ratings more than any other source, with publications second, and tribal field aides and Bureau of Indian Affairs tied for third place.

Five of the operators suggested that they could use additional training through Bureau of Indian Affairs or the State Extension Service.