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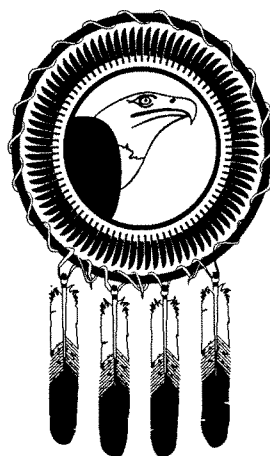
Economic Development: The Rosebud Sioux Indian Tribe

by

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Executive Summary

ECONOMIC DEVELOPMENT OPPORTUNITIES FOR THE ROSEBUD SIOUX INDIAN RESERVATION ROSEBUD, SOUTH DAKOTA

by

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The quest to attain economic self-sufficiency has dominated the political agenda on the Rosebud Sioux Indian Reservation for the past two decades and continues to dominate the agenda today. But in the last twenty years, little progress has been made toward developing a vibrant local economy.

The recommendations in this report are intended to provide the Rosebud Sioux Indian Tribe with a realistic appraisal of the options available to revitalize the Reservation's economy.

To bring about stable, long-term economic growth, the Tribe must concentrate on making the best possible use of their limited natural resources and the Reservation's comparative economic advantages. Moreover, local demand for goods and services should be exploited to develop locally-owned micro-enterprises and help insulate the reservation from downturns in the outside economy.

No identified mineral wealth exists on the Reservation, and only limited amounts of other commercially viable natural resources are available to the Tribe. Appendix 2 summarizes the Tribe's natural resources inventory.

Some members of the tribe are renowned for producing fine quality arts such as paintings, drawings and sculptures; as well as crafts such as star quilts, beadwork, corn jewelry, pottery, and wood carvings.

The Reservation offers private business operations some regulatory relief, but South Dakota also provides regulatory relief to businesses, rendering the Tribe's comparative advantage almost negligible. Tribally-owned businesses can be "8(a) certified" by the Small Business Administration, but the bureaucratic barriers to obtaining certification have made it almost impossible for the Tribe to exploit section 8(a) certification.

To make the best use of the tribe's limited resources and comparative economic advantages, I suggest the Tribe consider the following recommendations as a guide to economic development:

- * Develop an integrated Forest Products Enterprise.
- * Auction permits to hunt elk, buffalo, and antelope.
- * Develop a commercial fishery.

- * Market locally produced arts and crafts.
- * Develop a micro-electronics assembly industry.
- * Assess the feasibility of garment manufacturing.
- * Do not attempt to develop a local canning industry.
- * Assess the feasibility of developing aquaculture / silvaculture.
- * Avoid expending Tribal resources to build a Reservation-based tourist industry in the short-term.
- * Do not focus on building one large-scale, job-intensive industry.

Cattle ranching and agriculture are two activities which could help bring economic prosperity to the Reservation. However, because of the limited time available to prepare this report and because the Tribe is already aware of these opportunities, I have chosen not to focus on these activities.

Although the Tribe has a large, unemployed labor force, it is unlikely that hundreds of model workers will line up to take newly created Reservation jobs. To help identify industrial developments that may provide individuals with the kind of work they prefer, the Tribe should try to analyze the employment preferences of the workforce.

I want to make it clear to the people of Rosebud that this report is not exhaustive, nor does it present the "ultimate answer" to the troubling question of how to build a thriving, culturally sensitive and stable economy at Rosebud. My conclusions and recommendations are limited; they are only intended to help the Tribe allocate meager resources to bring prosperity and economic self sufficiency to the Reservation.

To compile this report, I have relied on extensive interviews with Tribal leaders, Tribal managers, BIA officials and Indian economic development experts. In addition, I have used data and other information provided by the Rosebud Sioux Tribe and others.

OPTIONS FOR BUSINESS AND INDUSTRIAL ENTERPRISE DEVELOPMENT
on the
ROSEBUD SIOUX INDIAN RESERVATION

	WOOD PRODUCTS	ARTS & CRAFTS	FISH HATCHERY	HUNTING	AQUACULTURE & SILVACULTURE	ELECTRONICS	CANNING	TOURISM
HISTORY of SUCCESSFUL OPERATION	YES	NO	NO	NO	NO	YES	NO	NO
COMPARATIVE ADVANTAGE	PINE & HARDWOODS	UNIQUE SKILL	RESERVOIRS	ELK & BUFFALO	GEOHERMAL POWER	SECTION 8a	NONE	CULTURE FISHING WOODS
QUALIFIED LABOR FORCE	YES	YES	YES	YES	N/A	POTENTIALLY	NONE	NONE
GENERATES ENVIRONMENTAL POLLUTION	NO	NO	NO	NO	NO	LITTLE	?	NO
INITIAL CAPITAL INVESTMENT	SMALL	SMALL	SMALL	SMALL	?	MODERATE	VERY HIGH	VERY HIGH
POTENTIAL EMPLOYMENT	30-50	?	SMALL	SMALL	?	20 +	?	HIGH
SIMILAR OPERATIONS in REGION	NO	YES	YES	NO	?	YES	NO	YES
ACCESS TO RESOURCES	YES	YES	YES	YES	YES	NO	NO	YES
COMMUNITY BASED v. CENTRALIZED	CENTRAL	COMMUNITY	N/A	N/A	N/A	CENTRAL	CENTRAL	COMMUNITY
REGIONAL ECONOMIC OUTLOOK	EXCELLENT	N/A	N/A	EXCELLENT	N/A	GOOD	POOR	ABOVE AVERAGE

I. INTRODUCTION

The Rosebud Sioux Indian Reservation is one of the poorest areas of the United States. Today, according to the Bureau of Indian Affairs, 86% of the workforce is unemployed, per capita income remains far below the national poverty line, and alcoholism, violent crime, substance abuse and other social ills plague the Reservation's residents.

Economic activity blossomed on the reservation during the late 1960's and early 1970's; federal funds poured into the Reservation's economy, and a variety of small, locally owned industries thrived. Yet, by the middle 1970's industrial activity on the Reservation ceased. Indian leaders and other local observers cite the rise of the American Indian Movement, ineffective, self-serving tribal leadership, tribal divisiveness, poor management of tribally-owned enterprises, and the decline of the regional economy as factors contributing to the decline of the economy.

As the situation worsened, successive tribal administrations attempted to revitalize the economy by pursuing grandiose development initiatives. These initiatives faltered primarily because the Tribe did not adequately assess the economic feasibility of each new project, nor did the Tribe have an integrated, long-term economic development strategy.

To lay the necessary institutional foundations for economic development, the Tribe - under the leadership of President Alex Lunderman - has recently reduced the size of the tribal council and is considering lengthening the President's term from two to four years. The Tribe has completed a forest management plan, a game and fish code, and is currently drafting a uniform commercial code.

My evaluation of Rosebud's economic opportunities takes into account the tribe's lack of capital to finance large-scale industrial projects, the shortage of trained business managers, and more importantly, the dynamics of the local and regional economy. In response to the Tribe's concerns, I have tried to focus on

business opportunities which require minimal start up and operating capital, do not pollute the environment, permit flexibility and are job intensive.

To target specific business and industrial activities, I have focused on utilizing the Tribe's unique natural and human resources, the Tribe's comparative economic advantages and the Tribe's existing institutional capacities. I have also relied on economic forecasts to gather information on the future economic condition of South Dakota and the west north central region of the United States.

II. IMMEDIATE ECONOMIC DEVELOPMENT OPPORTUNITIES

II.A Integrated Wood Products Industry

One of the best opportunities available to the Rosebud Sioux Indian Tribe is development of an integrated wood products industry.

II.A.1 Current Operations

The Rosebud Reservation is endowed with approximately 8,000 acres¹ of relatively high quality Ponderosa pine forest. The Tribe also has a significant volume of hardwood, but no inventory of this resource has ever been completed. In recent years, the Forest Products Enterprise (FPE) has been one of the only tribal enterprises to operate successfully on the Reservation.

FPE currently produces rough cut lumber and firewood; and maintains fire trails and thins the forest under contract from the Bureau of Indian Affairs. Bi-annually FPE also sells pine cones.²

II.A.2 Forest Products Industry: Potential Expansion

Expanding the current operation of the Forest Products Enterprise is a good way for the Tribe to utilize Reservation and local off-Reservation demand for wood products to promote economic growth. FPE recently acquired a new portable sawmill that will permit FPE to mill the entire annual allowable cut (500 MBF). With additional equipment FPE could vastly expand its scope of operations and the variety of products it could produce. Future operations could include the production and sale of picnic tables; "two by four" supports and door frames; moulding,

¹ Rosebud Sioux Forestry, Reservation Forest Management Plan and Environmental Assessment, Nov. 1986, p. 4.

² Charlie Moe, Manager, Rosebud Sioux Forest Products Enterprise, interviewed by Adam Diamant (Rosebud Sioux Indian Reservation), May 6, 1988.

picture frames, door frames, posts, poles, and pallets; and compressed sawdust fireplace logs.

II.A.3 Lakota Products: A Lesson From The Past

Expanding the scope of the Forest Products Enterprise to include production of finished wood products is sensible, in part, because this type of wood products industry was successful on the Reservation in the past.

Lakota Products began operations in 1971 producing wood pallets. At the peak of operations, Lakota Products employed more than 100 people to produce picture frames, wooden desktop "in/out" baskets, furniture, and other finished products for contracts with the U.S. Government and others.³

Tribal government interference in the daily management of Lakota Products was the primary cause of its collapse.⁴ A new integrated wood products industry is most likely to succeed on Rosebud if it is operated as an integrated part of the Forest Products Enterprise. This way the Tribe can capture the benefits of economies of scale and utilize FPE's successful management skills.

II.A.4 Regional Economic Outlook

Currently, demand for lumber and firewood from the Forest Products Enterprise exceeds FPE's production capacity. Even if FPE could harvest and mill the entire annual allowable cut, it would still be unable to completely satisfy local demand for lumber and firewood.⁵ In addition, 70-100 new homes are constructed

³ Benjamin Weiser, "Inside a Sioux Reservation: Villages of Despair," The Washington Post, (Sept. 9, 1984), p. 9.

⁴ Webster Two-Hawk, past President, Rosebud Sioux Indian Tribe, and other past and current Indian leaders, Interviewed by Adam Diamant (Rosebud Sioux Indian Reservation), May 5, 1988.

⁵ Moe, Interview.

on the Reservation annually - homes which should be constructed, in part, with FPE produced lumber and wood products.

Besides demand for construction materials on the Reservation, forecasts of the South Dakota economy indicate that the construction industry will expand throughout the end of the century.⁶

II.A.5 Potential Income

In 1987, the Forest Products Enterprise sold \$30,000 (100 MBF) of lumber; sales of other goods (e.g. pine cones, firewood) and services (e.g. thinning operations and fire trail maintenance) accounted for an additional \$230,000 gross income. Operating at full capacity with the proper equipment, FPE could realize \$350,000-\$400,00 annually from the sale of lumber, other construction materials and firewood. Additional income would also be generated by producing finished wood products for sale off-Reservation.⁷

II.A.6. Potential Employment

Currently, FPE employs 8 Rosebud residents full-time and 24 others on a part-time basis. In 1987, 60 individuals received income from the FPE. In the future, FPE could employ 15 people full-time⁸ and up to 100 individuals producing finished wood products.

II.A.7 Capital Investment

The next phase in the development of the Forest Products Enterprise requires a capital expenditure of approximately \$200,000. If the Tribe obtains 25-40 percent

⁶ North Central Region, Regional Information Service, (Data Resources Inc., Lexington MA), Winter 1987-88, p.45.

⁷ Moe, Interview.

⁸ Moe, Interview.

of the required financing, the BIA will provide a grant to cover the remaining expenditures.⁹

II.B. Fish Hatchery

The Tribe should develop a commercial fish hatchery to satisfy demand for fish to restock Reservation's lakes and ponds.

Currently, the Tribe's fish and game department purchases 5000 trout annually from a fish hatchery in neighboring Valentine, Nebraska.

By using local demand as a foundation to build a small, Reservation-based fish hatchery, the hatchery will be somewhat insulated from downturns in the outside economy. Eventually, this operation could grow and successfully compete with other hatcheries in the region.

II.B.1 Fish Hatchery: Foundation for Future Economic Development Besides providing income to the Tribe and jobs for Tribal members, a fish hatchery would also contribute to future economic development.

II.B.1.a Recycling Money Through the Reservation Economy

If the game, fish, and parks department purchased fish from a reservation-based fish hatchery, money would be recycled through the Reservation's economy fueling local economic growth. Residents from the surrounding region would also undoubtedly purchase stock, bringing outside money onto the reservation.

II.B.1.b Foundation for Development of Tourism

Construction of a commercial fish hatchery will help to develop the local tourist trade. To develop tourism, the Tribe can capitalize on the Reservation's

⁹ Moe, Interview.

reputation for fine fishing. And, as more anglers come to fish on the Reservation more stock will be needed annually to replenish lakes and ponds.

II.C. Hunting

Wildlife species living on the reservation include elk, buffalo, white tail deer, mule deer, antelope, pheasant, grouse, prairie chicken, dove, and turkey. Of these, the Tribe currently issues hunting permits for elk, deer, grouse, pheasant and turkey only.

II.C.1 Elk: Utilizing a Unique Wildlife Resource

Today, a herd of approximately 80 elk inhabit the western half of the Reservation. In 1987, the Tribe raffled two elk hunting permits for a total of \$5,000 income.¹⁰

Tribal conservation officers estimate the Reservation can support 160 elk, and the Tribe is currently taking steps to increase the elk population. With a herd of 160 animals, the Tribe could permit hunting of up to 10 trophy size bulls annually.¹¹

The market elk hunting is well developed. In the western United States, hunters regularly pay up to \$11,000 each for a single elk hunting permit. Although it is unlikely that elk on the Rosebud Reservation could command a premium price, Rosebud's elk could likely be sold for \$5,000 - \$8,000 each.¹² Currently, there are no permitted elk hunting as far east as the Rosebud Reservation.

¹⁰ Bob Rattling Leaf, Conservation Officer, Interviewed by Adam Diamant (Rosebud, S.D.), May 6, 1988.

¹¹ Rattling-Leaf, Interview.

¹² Professor Joseph Kalt, Discussion with Adam Diamant (Harvard University, Cambridge, MA), May 10, 1988.

Many Indian tribes, including the Jicarillo and Mescalero Apache of New Mexico and the White Mountain Apache of Arizona, generate hundreds of thousands of dollars annually from elk sales.

II.C.2 Buffalo Hunting

The buffalo hunting market is not as well developed as the elk hunting market. Nevertheless, hunters pay up to \$3,000 to hunt "free-roaming" buffalo in wilderness areas.¹³

Today, only 70 buffalo inhabit a small section of the Rosebud Reservation and buffalo hunting is prohibited. The Tribe is currently considering expanding the buffalo habitat by 1500 acres. Expansion will permit the buffalo population to grow to 150. A herd this size could yield 7-15 bulls annually.¹⁴

II.C.3. Antelope

Non-resident antelope hunting is prohibited on the Reservation. Today, approximately 250 animals fall under the jurisdiction of the Tribe. The market price for antelope is \$1000.¹⁵

II.D Arts and Crafts

The vibrant local market for Sioux arts and crafts is an economic opportunity which the Tribe should exploit.

Although tremendous demand for Sioux Indian arts and crafts exists in South Dakota, most of the products sold in the Black Hills, the Badlands, and other areas

¹³ Kalt, Discussion.

¹⁴ Rattling-Leaf, Interview.

¹⁵ Kalt, Discussion.

of the state frequented by tourists are produced by the Cherokee Indian Tribe of North Carolina and private, Hong Kong-based, non-Indian corporations.¹⁶

Residents of Rosebud could successfully market drawings, sculptures, moccasins, beadwork and dance outfits. Quilts would be more difficult to sell because consumers can, for the same price as a quilt produced at Rosebud, buy a higher quality quilt produced on the nearby Cheyenne and Yankton Indian reservations.¹⁷

I.D.1 Lakota Development Council: Marketing Sioux Arts and Crafts

Last year, the Lakota Development Council, located in Chamberlain, South Dakota, sold \$300,000 worth of locally produced Sioux Indian arts and crafts.¹⁸ According to Harold Moore, Executive Director of the Lakota Development Council and the Lakota Collection - a mail order business specializing in Sioux Arts and Crafts - Lakota Collection profits because he refuses to do business with suppliers who do not meet their contractual obligations. In addition, he supplies Indian-style arts and crafts that are in demand by the nation's non-Indian population.

II.D.2 Buchel Memorial Lakota Museum: Arts and Crafts at Rosebud

From 1971 through 1983, the Lakota Museum in St. Francis sold arts and crafts produced by local Indians. According to Moore, founder of the museum arts and crafts store, approximately 30-40 Rosebud Indians sold arts and crafts there. At its peak, this small over-the-counter store grossed approximately \$27,000

¹⁶ Harold Moore, Director, Lakota Development Council, Telephone Interview by Adam Diamant, (Chamberlain, S.D.), May 20, 1988.

¹⁷ Moore, Interview.

¹⁸ Moore, Interview.

annually. Today, Moore said, the business at the museum is virtually defunct.

II.D.3 Developing A Tribal Arts and Crafts Enterprise

Today local artisans and craftsmen hawk their work to non-Indians visiting Rosebud or sell it through operations like the Lakota Collection.

To successfully utilize the skills of local artists and crafts people as a way to stimulate the local economy, the Tribe should consider forming a joint venture arts and crafts enterprise or a tribal arts and crafts cooperative. This enterprise could purchase arts and crafts from local producers; and, sell them in a retail store on the reservation, to tourist shops in other parts of the state and to mail order operations specializing in arts and crafts.

II.D.4. Arts and Crafts Enterprise: Economic Benefits

An arts and crafts enterprise would create jobs for unemployed Indians. Moreover, the flexible scheduling afforded by arts and crafts production, combined with the fact that these products can be produced in Rosebud's isolated communities, will make it easier for unemployed Indians to make the transition to a structured work week.

II.D.5 Barriers to Developing Arts and Crafts Enterprise

According to Moore, the refusal of arts and crafts producers to meet rigorous supply schedules and produce items to certain quality specifications are significant barriers to developing a successful industry. Other past arts and crafts operations at Rosebud have failed, Moore believes, because the managers of these operations were "too sympathetic" to the crafts people and they charged exorbitant, "New York City boutique prices." As a result, the quality of the products was poor and supply was inconsistent.

II.E. Micro-electronics Assembly

The Rosebud Tribe should attempt to develop a micro-electronics enterprise to produce wire harnesses and circuit boards, and salvage parts from used electronic components.

II.E.1 Rosebud Electronics: Lessons From the Past

In 1967, Rosebud Electronics - a tribally-owned enterprise - began producing wiring harnesses for I.B.M. Corporation. By late 1973, the operation employed 98 people to manufacture harnesses and circuit boards. By 1969 Rosebud Electronics enjoyed a market situation in which "there is no lack of contracts to be filled."¹⁹ Yet, by the end of the decade it was defunct. This business, like others that once operated on the Reservation, failed, in part, because a newly elected tribal administration replaced experienced managers with less experienced people.

II.E.2. Barriers to Entry in the Micro-Electronics Business

One of the most daunting barriers to development of light industries at Rosebud is the Tribe's limited access to capital. However, the Tribe could limit capital outlay in several ways.

First, the Tribe already owns a number of buildings that could house light industrial operations such as a micro-electronics assembly plant. Second, the U.S. Department of Labor will fund training for Indian workers. Third, by forming a joint venture with successful private entrepreneurs, the Tribe could access managerial talent and ease the cost of obtaining equipment.

II.E.3 Micro-Electronic: A Foundation for Economic Development

¹⁹ Untitled Report on the Status of Economic Development, Rosebud Sioux Indian Reservation, March 1969.

A small micro-electronics industry would create a foundation on which to incrementally build greater industrial capacity at Rosebud. Eventually, this enterprise could obtain Section 8(a) certification from the Small Business Administration (see Appendix 3), which would enable it to obtain contracts from the Defense Department and the Department of Agriculture.²⁰

II.E.4 Milk's Camp Industries: A Model Indian Electronics Business

Milk's Camp Industries, located 100 miles east of Rosebud near Bonesteel, S.D. is a good model of an electronics assembly operation that could be successful at Rosebud.

Milk's Camp Industries began producing drums, totem poles and other souvenirs 20 years ago. In 1976, the business switched to electronics, and today, 20 local Indians build, dismantle and salvage computer parts for I.B.M. and manufacture circuit cards for Honeywell. In 1987, Milk's camp Industries made \$84,000 net on gross sales of over \$400,000. Although the business is section 8(a) certified, the vast majority of work done by Milk's camp Industries is non-section 8(a).²¹

II.E.5 Micro-Electronic Assembly: A Regional Economic Outlook

Although economic forecasts indicate the electrical machinery sector of the State's economy will continue to grow slowly (0.2% annually)²², current regional

²⁰ Office of Economic Adjustment, Office of the Secretary of Defense, Indian Business and the Defense Sector, (Nov. 1983), P.17.

²¹ Dorothy Boes, Manager Milk's Camp Industries, Telephone Interview by Adam Diamant, (Bonesteel, S.D.), May 10, 1988.

²² Regional Information Service, p.45.

demand for electronic components produced by Indian-owned businesses exceeds production.²³

II.F Garment Manufacturing

As in the electronics assembly industry, a firm involved in garment manufacturing must have access to low-cost, semi-skilled labor. Labor costs at Rosebud are low, and some local residents are skilled at sewing garments. Garments are also easily and inexpensively transported by truck. And, if successful, a small garment manufacturing enterprise could obtain Section 8(a) certification and provide the Tribe with another foundation for expansion.

Moreover, demand for low-priced clothing, especially children's clothing, exists on the Reservation; by supplying products to satisfy local demand, a Reservation-based garment manufacturing industry would remain somewhat insulated from regional economic decline.

II.G Other Light Industries

The Tribe should also consider developing other light industries at Rosebud. For example, the Tribe could produce mechanical parts and assemble mechanical components. However, one industry to avoid is canning. Besides the high initial capital outlay required and the need for sophisticated marketing strategies, the food products sector of the regional economy is forecast to decline dramatically. By the turn of the century 216,000 jobs in this sector are expected to disappear in the region.²⁴

²³ Mark Sullivan, Human Resources Director, Test Instruments Division, Honeywell Corporation, Telephone Interview by Adam Diamant, (Littleton CO), May 16, 1988.

²⁴ Regional Information Service, p. 45.

II.H Aquaculture and Silviculture

Substantial amounts of geothermal power on the reservation could make it possible to develop aquaculture - growing food products in warm water - and silvaculture on the Reservation.

Because the Tribe does not currently have the necessary technical skills to develop these operations now, the Tribe should gather specific technical information about possible aquaculture applications including fish, rice and other commodities. The Tribe should also assess the feasibility of a silvaculture operation - growing trees in water - to grow sapling pines to both replant on the Reservation and sell elsewhere.

II.I Livestock and Agriculture

Rosebud's good grasslands, abundant water supply, and operable irrigation equipment, make agricultural production and cattle ranching viable economic activities on the Reservation. However, because of the limited time available for this study, I have not had the opportunity to investigate the role these activities can play in developing a sustainable economy at Rosebud.

III. Long-Term Economic Development Opportunities

III.A Recreation-based Local Tourist Industry

Development of tourism is one long-term economic opportunity available to the Tribe. But, in the short-run, the Tribe should avoid using resources to build a tourist industry. Rather, as a first step to promoting tourism, the Tribe should concentrate on elevating the quality of life for the Reservation's 20,000 Indians by focusing on achieving short-term economic goals.

To promote tourism, the Tribe will have to make large capital investments to build lodging facilities, and repair existing campgrounds. Moreover, many tourists will not visit Rosebud until the Reservation is less run-down and the crime rate declines. Once these things have been accomplished, the Tribe should market fishing, and exposure to Sioux culture, to lure visitors to Rosebud. Unfortunately, because the Tribe's game herds are small, it is unlikely that many hunters will visit the Reservation.

III.B Avoid Development of a Single, Labor-Intensive Industry

The barriers to developing a large, labor-intensive industry on the reservation are enormous. First, building a large-scale industry requires huge capital expenditures. Second, economic dependence on a single industry could be disastrous for the local economy. Third, Section 8(a) certification - the primary avenue by which to build a large-scale, reservation-based industry - is only advantageous when procuring contracts from the Defense Department, and, to a limited extent, from the Department of Agriculture (See Appendix 3). In short, Section 8(a) certification can open up significant, but only limited markets.

Other tribes in the region, most notably the Devil's Lake Sioux and the Turtle Mountain Chippewa, have built relatively successful, large-scale industries;

but the continued viability of these industries depends entirely on demand from the Defense Department. This dependency is a recipe for future economic disaster; if, for whatever reason, DOD decides to stop contracting at these enterprises the economies of these Reservations will be crippled. In addition, many Indians have refused to do the rote assembly line work typically required at these large facilities. Only 41% of the 500 employees at the Brunswick plant on the Devil's Lake Sioux Reservation are enrolled Tribal members.²⁵

III.C. Promote Micro-enterprise Development

Given the Rosebud Sioux Tribe's dearth of natural resources, capital, and comparative economic advantages, the Tribe should focus on developing an economy primarily based on locally-owned micro-enterprises. Although development of a micro-enterprise-based economy may be painstakingly slow and require detailed planning, micro-enterprise development offers the Tribe the best opportunity to achieve long-term, sustainable economic development.

III.C.1 Local Demand as a Foundation for Economic Growth

Local demand for goods (e.g. bread, jam, fruit, furniture) and services (e.g. auto repair, typing, construction, home repair) can provide the incentive to develop local, Indian-owned businesses. By satisfying local demand, these businesses will also remain somewhat insulated from economic decline in the off-reservation economy. In addition, these micro-enterprises could successfully expand to supply goods and services off-reservation. Of course, success of a particular micro-enterprise depends, in part, on producers gaining access to competitively priced inputs and providing competitively priced outputs.

²⁵ Jerry Flute, Assistant Director of Community Development, Association of American Indian Affairs, Telephone Interview by Adam Diamant,(Sisseton, S.D.), May 23, 1988.

IV. Conclusion

To encourage economic growth on the Rosebud Sioux Indian Reservation, the Tribe must focus on developing economic activities which best utilize the Tribe's limited natural resources, capital, and management skills. In addition, the Tribe must concentrate on producing goods which are easy and inexpensive to transport by truck, and which provide opportunities for future expansion.

To stimulate the growth of the Rosebud economy, and help to insulate it from regional economic downturns, the Tribe should focus on producing goods and services that satisfy existing demand on the Reservation.

It is unlikely that the Tribe will be able to develop a single large, job-intensive industry to solve its present economic problems and guarantee future economic self-sufficiency. Instead, the Tribe must promote the development of a mix of tribally-owned, joint-venture, and private businesses, as well as "mom and pop" micro-enterprises, to solve the current economic crisis.

The recent adoption of a Tribal game and fish code, and the forthcoming adoption of a uniform commercial code are both critical institutional advances that will help the Tribe achieve economic self-sufficiency. Along the same institutional lines, the Tribe should consider establishing a semi-autonomous Business Planning Commission to oversee the operation of tribally-owned enterprises. This may help to insulate future tribal business ventures from tribal politics.

The Rosebud Sioux Tribe is moving toward successful economic development. However, ultimate success will depend upon whether the Tribe chooses to use its limited natural resources, comparative economic advantages and local demand as the foundation for long-term economic development, or instead, attempts to solve its economic problems by looking for quick and easy solutions.

APPENDIX 1

OPTIONS FOR BUSINESS AND INDUSTRIAL ENTERPRISE DEVELOPMENT
on the
ROSEBUD SIOUX INDIAN RESERVATION

	WOOD PRODUCTS	ARTS & CRAFTS	FISH HATCHERY	HUNTING	AQUACULTURE & SILVACULTURE	ELECTRONICS	CANNING	TOURISM
HISTORY of SUCCESSFUL OPERATION	YES	NO	NO	NO	NO	YES	NO	NO
COMPARATIVE ADVANTAGE	PINE & HARDWOODS	UNIQUE SKILL	RESERVOIRS	ELK & BUFFALO	GEOTHERMAL POWER	SECTION 8a	NONE	CULTURE FISHING WOODS
QUALIFIED LABOR FORCE	YES	YES	YES	YES	N/A	POTENTIALLY	NONE	NONE
GENERATES ENVIRONMENTAL POLLUTION	NO	NO	NO	NO	NO	LITTLE	?	NO
INITIAL CAPITAL INVESTMENT	SMALL	SMALL	SMALL	SMALL	?	MODERATE	VERY HIGH	VERY HIGH
POTENTIAL EMPLOYMENT	30-50	?	SMALL	SMALL	?	20 +	?	HIGH
SIMILAR OPERATIONS in REGION	NO	YES	YES	NO	?	YES	NO	YES
ACCESS TO RESOURCES	YES	YES	YES	YES	YES	NO	NO	YES
COMMUNITY BASED v. CENTRALIZED	CENTRAL	COMMUNITY	N/A	N/A	N/A	CENTRAL	CENTRAL	COMMUNITY
REGIONAL ECONOMIC OUTLOOK	EXCELLENT	N/A	N/A	EXCELLENT	N/A	GOOD	POOR	ABOVE AVERAGE

APPENDIX 2

NATURAL RESOURCES INVENTORY OF THE ROSEBUD SIOUX RESERVATION
and
ECONOMIC DEVELOPMENT OPPORTUNITIES

	TIMBER		GAME				
	PONDEROSA PINE	HARDWOOD	ELK	BUFFALO	ANTELOPE	DEER	FISH
QUANTITY	MODERATE 500 MBF/YR	MODERATE N/A	SMALL 80	SMALL 70	SMALL 250	SMALL 4-5000	ABUNDANT
CURRENT MARKET DEMAND	YES	YES	YES	YES	YES	INSUFFICIENT	YES
CURRENT UTILIZATION and INCOME	100MBF/YR \$30,000	400 CORDS \$32,000	2 PERMITS/YR \$5,000	HUNTING PROHIBITED	HUNTING PROHIBITED	150 PERMITS/YR \$15-\$100 EA	N/A
POTENTIAL DEVELOPMENT	YES	YES	160+	150	N/A	N/A	N/A
POTENTIAL UTILIZATION GROSS INCOME	500 MBF/YR \$300,000/YR	1000 CORDS \$82,500/YR	SMALL 4-10/YR \$20-50,000	SMALL 7-15/YR \$14-30,000	SMALL \$1,000 EA	SMALL 150 PERMITS \$15-\$100 EA	MODERATE
CAPITAL INVESTMENT	\$200,000	SMALL	SMALL	SMALL	SMALL	SMALL	SMALL
LABOR INTENSIVE	MODERATE	MODERATE	NO	NO	NO	NO	NO
HISTORY of UTILIZATION	YES	YES	YES	NO	NO	NO	YES
UNIQUE in REGION	YES	YES	YES	YES	NO	NO	NO
COMPARATIVE QUALITY	HIGH	N/A	N/A	N/A	N/A	N/A	HIGH
USING IN NEIGHBORING COUNTIES	NO	NO	NO	NO	YES	YES	YES

NATURAL RESOURCES INVENTORY OF THE ROSEBUD SIOUX RESERVATION
and
OPPORTUNITIES FOR ECONOMIC DEVELOPMENT

MINERALS etc.

	MANGANESE	OIL/GAS	URANIUM	ZEOLITES	VOLCANIC ASH	SAND and GRAVEL	WATER	GEOTHERMAL	SHALE
QUANTITY	ABUNDANT	NON-EXISTENT COMMERCIAL QUANTITIES	MINIMAL LOW GRADE	ABUNDANT LOW GRADE SCATTERED	ABUNDANT LOW GRADE SCATTERED	ABUNDANT	ABUNDANT 151,000 ACRE-FT/YR	ABUNDANT	ABUNDANT
CURRENT MARKET DEMAND	NO	YES	YES	NO	NO	NO	YES	YES	NO
POTENTIAL DEVELOPMENT	POSSIBLE	NONE	NONE	UNLIKELY	UNLIKELY	UNLIKELY	YES	YES	UNLIKELY
CURRENT UTILIZATION and INCOME	NONE	NONE	NONE	NONE	NONE	NONE	IRRIGATION	HEATING	NONE
POTENTIAL UTILIZATION GROSS INCOME	?	NONE	NONE	NONE	SMALL	NONE	YES	YES	NONE
HISTORY of UTILIZATION	NO	NO	NO	NO	YES	YES	NO	YES	NO
CAPITAL INVESTMENT	LARGE	N/A	LARGE	LARGE	N/A	SMALL	LARGE	?	LARGE
LABOR INTENSIVE	YES	N/A	NO	N/A	N/A	YES	NO	NO	NO
UNIQUE in REGION	NO	N/A	N/A	NO	NO	NO	YES	NO	YES
COMPARATIVE QUALITY	POOR	POOR	POOR	POOR	POOR	GOOD	HIGH	HIGH	HIGH
OPERATING NEIGHBORING COUNTIES	NO	NO	NO	NO	NO	NO?	NO	YES	NO

NATURAL RESOURCES INVENTORY OF THE ROSEBUD SIOUX RESERVATION
and
OPPORTUNITIES FOR ECONOMIC DEVELOPMENT

LAND

	AGRICULTURAL (ACRES)	RANGE (ACRES)	IDLE (ACRES)
QUANTITY	100,000	500,000+	72,000
CURRENT MARKET DEMAND	NO	YES	YES
POTENTIAL DEVELOPMENT	YES	YES	YES
CURRENT UTILIZATION and INCOME	100,000 ?	430,000 \$900,000	0 0
POTENTIAL UTILIZATION GROSS INCOME	SMALL	SMALL + 72,000 ACRES	N/A
HISTORY of UTILIZATION	NO	YES	N/A
CAPITAL INVESTMENT	MODERATE	SMALL	N/A
LABOR INTENSIVE	YES	MODERATE	N/A
UNIQUE in REGION	NO	NO	NO
COMPARATIVE QUALITY	AVERAGE	AVERAGE	N/A
OPERATING NEIGHBORING COUNTIES	YES	YES	?

RESOURCES OF THE ROSEBUD SIOUX INDIAN TRIBE

LAND

The Rosebud Sioux Reservation is comprised of 954,000 acres in Todd County, S.D. and four surrounding counties. Currently there are 206 range units, encompassing approximately 500,00 acres of grazing land. In 1987, 72,000 acres of grazing land lay idle.

LABOR FORCE

The workforce is estimated to be approximately 5000 enrolled Tribal members. The labor force is dominated by unskilled, uneducated workers. The average Tribal members has attained a sixth grade literacy level.

TIMBER

By tribal ordinance 22,000 acres of land has been set aside as a timber reserve in which grazing is forbidden. The forest management plan permits 500 MBF annual cut on 7,917 regulated acres of Ponderosa Pine. Ponderosa pine is the most prevalent type of wood on the Reservation; most of the timber is post and pole size.

WILDLIFE

Wildlife species on the reservation include white tail and mule deer, antelope, buffalo, elk, pheasants, grouse, dove and turkey. The current inventory of game on the reservation includes: 80 elk, 70 buffalo, 250 pronghorn antelope, approximately 4-5000 white tail and mule deer, and abundant Bass, Northern Pike and Rainbow trout.

WATER

The reservation is situated above 937 square miles of the northern tip of the Ogallala Aquifer. The volume of water in the aquifer below the Reservation is approximately 20 million acre-feet. The total recharge of the aquifer is 151,000 acre-feet/year.

There are 21,500 acres of irrigable land on the Reservation, of which 7,100 acres are currently irrigated. Rosebud can increase its water consumption three times over the level of present consumption without hydrologic problems and without a comprehensive study of the aquifer. The tribe currently has 14 center pivot irrigation pivots with capacity to irrigate 1,600 acres of land.

MINERALS

Few, if any, commercially recoverable mineral deposits exist on the Rosebud Sioux Indian Reservation. However, there appear to be some large deposits of sand and gravel on trust land in Mellette county, as well as significant deposits of Manganese and iron in Gregory County. Sandstone, limestone and quartzite (estimated deposit of 6,200,000 cu.yds), and small deposits of volcanic ash and diatomaceous earth are also found on the reservation.

Manganese is a brittle-metal used mainly to produce metal alloys. Additionally, manganese is used in production of dry-cell batteries. Large deposits of manganese, embedded in hard nodules, are located the Missouri river. Within these maganese nodules, deposits of cobalt and other strategic minerals may exist. Mining this manganese is currently uneconomical. However, in the future, if it became difficult for the nation to purchase manganese, or certain other strategic minerals, on the world market, it may become profitable to mine these nodules. Manganese mining at Rosebud would be labor intensive.

Sand, gravel and shale are abundant on the Reservation. These minerals can be used to make roadbed, and, with the addition of limestone, to produce cement.

Volcanic ash, diatomaceous earth and zeolites are abundant on the Reservation, but the deposits of each are low-grade and widely scattered. Volcanic ash is often used as an abrasive in scouring powder and commercial cleansers; diatomaceous earth is used for making water and fuel filters, ceramics, and may be used as a form of insulation; and, naturally occurring zeolites are used in water softeners and fuel refining. However, poor-quality deposits, and the existence of huge, high-quality deposits in other states, means it is unlikely that they will ever be commercial valuable.

SOURCES:

1. Forest Management Plan and Environmental Assessment, Rosebud Sioux Forestry, Rosebud Sioux Indian Reservation, S.D., 1986.
2. Untitled, BIA Document on the Status of the Rosebud Sioux Indian Reservation, 1988.
3. Survey of Mineral Deposits, Rosebud Sioux Indian Reservation, South Dakota School of Mines, 1980.
4. Water and Mineral Resources Report, Rosebud Sioux Tribe, 1986.
5. Mike Carson, Bureau of Indian Affairs, Interviewed by Adam Diamant, (Mission, S.D.), May 5, 1988.
6. Charlie Moe, Manager, Forest Products Enterprise, Interviewed by Adam Diamant (Rosebud, S.D.), May 6, 1988.
7. Bob Rattling-Leaf, Conservation Officer, Rosebud Sioux Indian Tribe, Interviewed by Adam Diamant, (Rosebud, S.D.), May 6, 1988.
8. Dr. Frederick Rich, Associate Professor, South Dakota School of Mines, Telephone Interview by Adam Diamant, May 18, 1988.

APPENDIX 3

SECTION 8(a), SMALL BUSINESS ADMINISTRATION: REQUIREMENTS, ADVANTAGES AND LIMITATIONS

To qualify for Section 8(a) certification from the Small Business Administration (SBA), a minority-owned small business must meet the following criteria :

1. the business must have a verifiable two-year track record of operations before it is eligible to obtain section 8(a) certification;
2. the business must provide two years' profit and loss statements to SBA for inspection;
3. the business must satisfy an SBA defined performance standard; and
4. the owners of the business must fill out an application.

* This is only a partial list of eligibility criteria to obtain Section 8(a) certification.

It is possible for a minority-owned small business to circumvent these requirements if the manager of a new, or operating, business is a member of a recognized minority group and has 7-10 years experience managing a similar operation. This manager must also be principal owner or a co-owner of the business seeking certification.

The primary economic advantage of obtaining Section 8(a) certification is that a Section 8(a) certified business does not have to compete with non-minority owned businesses to obtain certain contracts and subcontracts from the U.S. Department of Defense and the U.S. Department of Agriculture.

To successfully capitalize on Section 8(a) certification a businessman must be informed about the procurement systems used within DOD and the USDA. For more information about DOD contracting with minority-owned small business contact:

Defense Logistics Agency
Defense Personnel Support Center
2800 S. 20th. St.
PO Box 8419
Philadelphia, PA 19101-8419

SOURCES:

1. Jerry Flute, Assistant Director of Community Development, Association on American Indian Affairs, Sisseton, S.D.
2. Office of Economic Adjustment, Office of the Secretary of Defense, Indian Business and the Defense Sector, Nov. 1983.

APPENDIX 4

ECONOMIC FORECAST FOR THE WEST NORTH CENTRAL REGION OF THE UNITED STATES

Through the end of 1990, total non-agricultural employment in the West North Central Region of the U.S. is expected to grow by 2.2% annually. South Dakota will lead the region in employment growth in this sector.

In the manufacturing sector, growth will be most rapid in non-electrical machinery and printing and publishing through the year 2000. Annual growth of 1.5% in these sectors will account for approximately 60,000 new jobs in the entire region. In South Dakota, non-electrical machinery will grow by 2.1% annually - faster than the region as a whole.

Employment in printing and publishing in South Dakota is projected to increase by a few hundred employees by the end of the century. Electrical machinery and transportation equipment should experience only slight (0.2%) growth in employment through 2000 in the state. Like printing and publishing, electrical machinery and transportation will experience slow growth with the addition of only few hundred jobs each through the end of the century.

While the aforementioned sectors show modest growth through 2000, the food and products industry is expected to lose 216,000 jobs overall in the region. Like the region as a whole, South Dakota will experience a moderate slump in employment in the food and products sector. By the year 2000, the state will lose approximately 700 jobs in this sector.

In the non-manufacturing sector of the economy, services will experience the most dramatic growth, 1.8% annually resulting in 435,000 new jobs in the region.

The finance, insurance and real estate sector will grow 1.7% annually through 2000 and employment in this sector will increase 115,000 in the region. In South Dakota, regional growth in these sectors will be reflected by both growth in the trade sector and the services sector of the state economy. By 2000, employment in the trade sector will grow by 9000 employees (1% annual growth), and employment in the services will grow by 14,600 employees (1.6% average annual growth).

Finance, insurance and real estate will be the fastest growing non-manufacturing sector (1.7% annual rate, 3,600 new employees by 2000) in the state, while construction will experience moderate growth (1,800 new jobs).

Source: Regional Information Service, North Central Region, Data Resources, Inc. (Lexington, MA), Winter 1987-88.

