

DOCUMENT RESUME

ED 241 189

RC 014 064

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 TITLE You Don't Have to Be Poor to Be Indian: Readings in Resource Development.  
 INSTITUTION Americans for Indian Opportunity, Inc., Albuquerque, N. Mex.  
 SPONS AGENCY Economic Development Administration (DCC), Washington, D.C.  
 PUB DATE Nov 81  
 NOTE 187p.  
 PUB TYPE Guides - Non-Classroom Use (055) -- Viewpoints (120)

EDRS PRICE MF01/PC08 Plus Postage.  
 DESCRIPTORS \*Administration; Agriculture; American Indian Reservations; \*American Indians; Banking; Case Studies; Coal; Consultants; \*Decision Making; Developing Nations; \*Economic Development; Economic Opportunities; Energy; Federal Indian Relationship; Forestry; Leadership; Mining; \*Natural Resources; \*Self Determination; Taxes; Tourism; Treaties; Tribal Sovereignty; Tribes; Trust Responsibility (Government)

IDENTIFIERS Colorado River Indian Tribe; Fishing Rights; Negotiation Processes; \*Resource Development; Uranium Mining

ABSTRACT

This book contains discussions of many of the problems that tribal decision makers must face. It is intended to supply information that may be useful in making future development decisions and to suggest options for Indian control of Indian resource development. The book contains chapters on economic development and long range planning; parallels between American Indian tribes and developing nations such as the Pacific island of Nauru; barriers to development; tribal sovereignty versus economic development; choosing tribal advisors; dealing with developers, including negotiating with the federal government and with mining companies and developing taxation methods; dealing with financial institutions; opening Indian reservations to tourism; federal management of Indian forest lands; Indian fishing rights; Indian agriculture and the Colorado River Indian Tribe's tribal farm; energy resources; coal and uranium on reservation lands; and the impact of development decisions on the tribes. (SB)

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## FOREWORD

*Dear Friends:*

This book is a product of the work we at Americans for Indian Opportunity have done over the past five years. Maggie Gover has written most of it and edited the rest. However, it has been a cooperative effort of every staff member and every board member and many of our friends in the Indian community have participated in it as well. We are grateful to all those who have been a part of it; who have shared their experiences and who have encouraged and supported our efforts.

Ours is not a book with all the answers. In fact, there are very few answers — there are mostly questions. If you believe in self-determination as we do, then you will understand that each tribe has to answer the questions for itself in a situation where there are very few right or wrong answers. What is right for one tribe may be wrong for another.

We do know that all tribes are facing enormous challenges. The assumption of the administration of growing numbers of Federal programs has placed great pressures on tribal governments. These programs have often become drains on the tribal resources. If this trend is not reversed, then tribes will be bankrupted as cities such as New York have been.

Some say that AIO is pro-development. If a tribe knows the trade-offs and has control of that development, it is its choice. Some say that we're too close to corporations. You could say we are only if corporation involvement brings the kind of capital investment that a tribe needs to control its own development. On the other hand, it's been said that we're anti-development because of our insistence on tribal environmental regulation. Or you can say that we're all of these things. If there is one tribe or many tribes who want to use one or two or all three of these methods in controlling their natural resources in a culturally, environmentally, and economically sound way, we are for it.

Maggie has a way of turning words, using Oklahoma expressions, and of using examples which may offend the sensibilities of those of a more literary bent. Those of us who know — and love — her are grateful when she merely calls a spade a spade.

We hope you will find this book a useful tool.

Love,



LaDonna

For my children, Kevin, Lisa, and Alexis, who have always had to bear the burden of a white mother — and who now have the additional burden of having a white mother who writes about Indians.  
And for LaDonna and the rest of the Board of Americans for Indian Opportunity who trusted me.  
And for the AIO staff who never let me down.

**YOU DON'T HAVE TO BE POOR TO BE INDIAN**

***READINGS IN RESOURCE DEVELOPMENT***

**BY MAGGIE GOVER**

This book is the result of  
A.I.O.'s Indian Natural Resources Program,  
"Indian Control of Indian Resources"  
partially funded by the Economic Development  
Administration and MacDonald Corporation.

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"This technical assistance study was accomplished by professional consultants under contract with the Economic Development Administration. The statements, findings, conclusions, recommendations, and other data in this report are solely those of the contractor and do not necessarily reflect the views of the Economic Development Administration."

November 1981

## INTRODUCTION

Suppose you have just been elected Chairman of your tribe. Unemployment on your reservation is somewhere between twenty-five and eighty-five percent. Fifty to seventy-five percent of your tribal members are living in substandard housing. The size of your tribe is kept to a minimum because your babies are dying four times as often, and your adults are dying thirty years sooner than those in the larger society. Your children are dropping out of school and those who don't are forced to leave your reservation to seek higher educational opportunities and job skills and are prevented from returning because there is no way to use those new found skills if they want to come home. Under government policy, some of your children have been arbitrarily terminated because they have become "Urban Indians." And you and your whole tribal council are up for re-election in twelve short months!

Now, suppose one day you are visited by a delegation from a large multi-national corporation whose revenues for one year nearly equal the total revenues of the member nations of the Organization of Petroleum Exporting Countries (OPEC). They tell you that, thanks to a government project which photographed the earth using highly accurate sensory devices (they can tell the difference in the varieties of corn growing in Iowa!), they know your reservation is sitting on a major copper deposit. (Your trustee, the federal government, which has been managing your resources for over a hundred years, neglected to tell you this, of course, though they supplied the technology that provided the information to the company.) The company has a deal for you. They'll give you an upfront bonus that can be distributed to your members on a per capita basis for signing a lease which will allow the corporation to come in, do test drilling and determine where they want to put their mine. The tribe will be expected to participate in an unspecified amount of the exploration costs and will ultimately receive a royalty on the copper produced if and when the corporation decides to develop.

You don't have any idea whether you have mineable copper. You don't know the current value of copper; you don't know the marketing potential; and most important to you, you don't have any way of knowing what the environmental or sociological impact will be on your people. All you know for sure is that they've got a check which means that every member of your tribe could have some money in his pockets before Christmas or the annual tribal celebration, and, incidentally, before tribal election day.

If you lose the election, you lose your job (it may or may not be paying you a nice salary) which gives you a chance to do good things for your people. Your position offers some prestige in the community. It allows you to see that your brother-in-law has a job under your patronage with which he can support your sister and eight nieces and nephews, and it pays your travel and per diem to Washington, D.C. several times a year and to the NCAI convention.

Hard choices? Yes, indeed. But typical of the dilemma that tribal decision-makers face every day. Sometimes there are offers from developers to be considered, accepted, or rejected. At other times, a decision has to be made as to whether or not to accept a factory or a government program of doubtful long-range benefit.

Tribal decision-makers have the hardest jobs in the world. The external pressures come from the most sophisticated organizations — federal, state and local governments, local traders or ranchers, multinational corporations, "Do-gooders," universities, religious institutions, environmental groups, etc. The internal pressures come from tribal members who are often underfed, ill housed, under-educated (by non-Indian standards), and unemployed. Your tribal members are distrustful because of past experiences with outside pressure groups and some of the earlier tribal leadership. Furthermore, they have often adjusted to an isolation that gives them little exposure to, and therefore, little understanding of the outside pressures faced by decision-makers.

Another pressure that tribal decision-makers must deal with is the knowledge that often the decisions they make will affect not only their own tribes, but every other tribe in the country. Suppose a tribe makes a decision to bring a court case to test some area of jurisdiction. Suppose the case is not a good case or the lawyer does not

do his work well and the case is lost. The result is that a precedent is established that may take years to overcome and which will be used against every other tribe. Suppose a developer makes a bad deal with one tribe and it sets the pattern for their dealings with other tribes with the same resources. The bad deal has been approved by the trust officer so you can't expect help from that source; the trustee isn't going to admit he failed to act in the best interests of his beneficiaries, is he? Suppose a piece of legislation has been introduced in the Congress which affects all Indians. Sounds easy, perhaps, but suppose it's an appropriations bill which earmarks money for a particular tribe that is sophisticated enough to lobby for its own money. The losers are other tribes, less sophisticated and less aggressive.

Yet, Indian tribal decision-makers have the most rewarding jobs in the world. They are working for their people — their children, their aunts, their cousins, and their grandmas, who raised them. They are people who have survived *as a people* every kind of hardship that can be imposed upon the hearts, minds, and bodies. They have maintained a strength and dignity and cultural integrity that has never been equaled.

This document is not intended to be a how-to-do-it manual for economic development. It is intended to be a discussion of problems that tribal decision-makers must deal with, to supply information that may be useful in making future decisions, and hopefully, to suggest some options or new ideas for Indian control of Indian resource development.

# TABLE OF CONTENTS

CHAPTER 1	CREATING AN ENVIRONMENT FOR SUCCESS: THE IMPORTANCE OF LONG RANGE PLANNING . . . .	9
CHAPTER 2	PARALLELS WITH DEVELOPING FOREIGN NATIONS: LEARNING FROM THE EXPERIENCES OF OTHER NATIONS . . . . .	13
	APPENDIX A: An AIO Case Study The Pacific Island of Nauru: A parallel for Indian Nations? . . . . .	16
	By Sherry Horosko	
CHAPTER 3	BARRIERS TO DEVELOPMENT . . . . .	21
CHAPTER 4	TRIBAL SOVEREIGNTY VS. ECONOMIC DEVELOPMENT . . . . .	31
CHAPTER 5	CHOOSING YOUR ADVISORS: WHO CAN YOU TRUST? . . . . .	35
CHAPTER 6	DEALING WITH DEVELOPERS . . . . .	39
	APPENDIX I: Government Negotiating Techniques and Strategies . . . . .	45
	By Charles Lipton	
	APPENDIX II: Getting a Fair Deal in Mining Projects . . . . .	53
	By Stephen Zorn	
	APPENDIX III: Indian Resource Projects: A Note on Possible Forms of Taxation . . . . .	64
	By Stephen Zorn	
CHAPTER 7	DEALING WITH FINANCIAL INSTITUTIONS . . . . .	69
CHAPTER 8	INDIAN RESERVATIONS: PLAYGROUNDS FOR THE AFFLUENT? . . . . .	79

CHAPTER 9	A VIOLATION OF TRUST: FEDERAL MANAGEMENT OF INDIAN FOREST LANDS .....	89
	By Richard Nafziger	
CHAPTER 10	FISH STORIES: THE ONES THAT DIDN'T GET AWAY FISHING RIGHTS .....	103
	By Kathryn Kyle	
CHAPTER 11	INDIAN AGRICULTURE: YOU REAP WHAT YOU SOW .....	113
	A CASE STUDY: Colorado River Indian Tribe CRIT Tribal Farm .....	120
	By Faith Conlon	
CHAPTER 12	ENERGY .....	125
CHAPTER 13	COAL: BLACK DEATH OR NEW LIFE FOR RED CULTURE .....	127
	By David Logsdon	
CHAPTER 14	INDIAN URANIUM: PROFITS AND PERILS .....	139
	By Richard Nafziger	
CHAPTER 15	CONSIDER THE IMPACTS .....	183
CHAPTER 16	WHAT WILL OUR GRANDCHILDREN SAY? .....	189
CONTRIBUTORS .....		191



## CHAPTER I

### CREATING AN ENVIRONMENT FOR SUCCESS: THE IMPORTANCE OF LONG RANGE PLANNING

*"The key to developing your own resources, whether they be industrial or business endeavors or natural resources is creating an environment for success."*

David Lester

Creating such an environment is the job of Indian tribal decision-makers. Planning for economic development cannot be done in a vacuum. The total needs of the community must be considered. Successful Indian projects are those that come from within the community itself. The history, tradition and experience of the tribe must be considered. It takes more than a training program to prepare a community's social fabric to accept what hasn't been done before. One of the reasons for the failure of so many industrial park projects is that they are basically geared to manufacturing enterprises. For many Indians and Indian communities, manufacturing is not within their experience. As a result, most manufacturing efforts have not only failed, they have been disruptive to the community.

#### **What Is Economic Development?**

Economic development is not education, health, housing, manpower training, etc., though all of these are related to it. Economic development is not just creating jobs. Many programs have been devised and millions of dollars have been spent to create jobs for Indians. Creating jobs does not change the economic relationship between Indians and society. During the period when there was slavery in this country, there were no unemployed Blacks. Slavery is the only system that guarantees 100% employment.

Economic development is the production of wealth for owners. *Indian economic development is Indian ownership of the economic activities taking place in the Indian community.* The classic approach is to take outside capital, outside technology, outside management and concentrate them in an area for profit. This is not acceptable in the Indian community because the process ceases to be developmental and commences to be exploitive in nature.

The primary ingredient necessary to gaining control of resource utilization and development is the determination to do it. Basic knowledge is the key to making basic decisions. Economic development on Indian reservations is not truly successful unless the dollars from the basic source of income are turned over again and again *in the community*. In the average non-Indian community a dollar turns over, that is, is respent, seven times before it leaves the community. In the average Indian community, it turns over less than once.

In a city, for instance, where the basic industry is an automobile manufacturing plant, the major income and profits go to the owner. The majority of the dollars that go into the pockets of the workers in that plant go back into the community where the workers live; where they buy their housing, clothing, groceries, health care services, automobiles, gasoline, washing machines, school supplies, etc. It's where they see their movies, do their bowling, buy their softballs, pay their green fees, eat their hamburgers, drink their beer, do their laundry and buy their kids ice cream cones and fried chicken.

In turn, the money spent on all these things pays the salaries of the people who build the houses; who sell the automobiles, golf balls, clothing, groceries, school supplies; who run the beer joints and movie houses and ice cream parlors.

They, in turn, buy housing, clothing, groceries, play golf, drink beer and buy their kids ice cream cones. The cycle continues until the dollar has turned over *within the community* seven or more times. In a typical Indian community, the paycheck comes in, whether it is from federal programs or a factory or a coal mine. There are no Indian-owned services available. You drive off the reservation to the nearest community which provides the services needed, pay your money and the dollars are gone into the economy of that community. The manufacturing plant will never be totally self-sufficient. That is, they must buy supplies, materials, equipment, etc., from somebody. They buy everything from tissue paper and typewriter ribbons to computers. Is there any reason why they shouldn't be buying their supplies from Indian vendors?

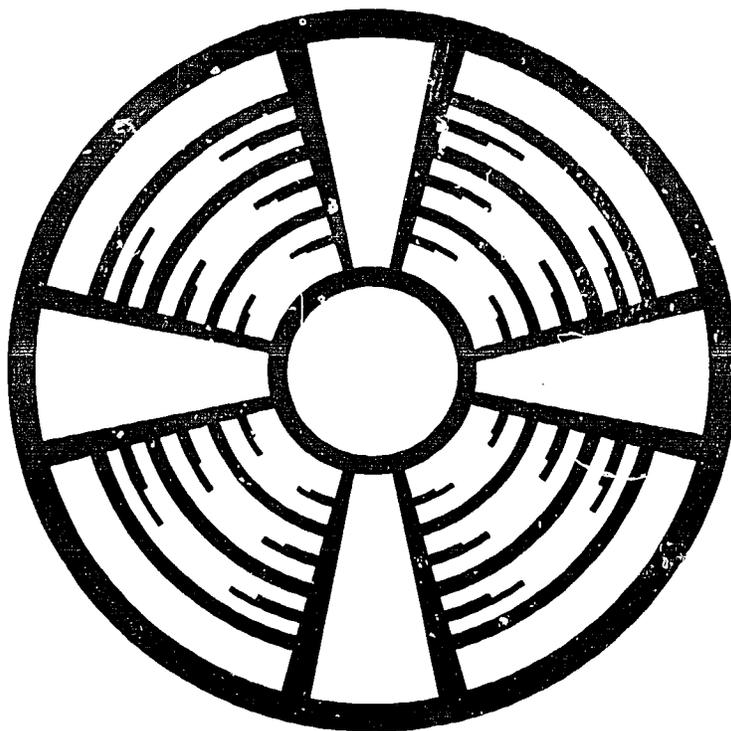
Informed decision-making is the key to gaining control of the resource utilization and economic growth of your community. Questions that should be answered include the following:

1. *What are the long range goals of my tribe?* Are they to provide opportunities for all members of your tribe to live on your reservation, to maintain tribal traditions, to have good jobs, decent housing, good health care, educational opportunities which will give the children the option of staying or leaving?
2. *What are our human resources?* How many people live here? How many of your tribal members live somewhere else because they can't make a living here? How old are they?
3. *What is the potential for development of our human resources?* What skills do they possess? What would it take to attract those people away from the reservation back again?
4. *What are the natural resources of my reservation?* How much land? What are our replenishable resources — timber, agricultural or rangelands, water, etc? What are our non-replenishable resources — minerals such as coal, copper, sand and gravel, etc?
5. *What is the potential for the development of those resources?* What is their quantity, quality and value?
6. *What is the decision-making structure within my tribe?* Are we living under a federally imposed constitution which does not allow us to exercise tribal sovereignty to the maximum? How can it be changed?

It would seem that all that information would be readily available and easily accessible. Unfortunately, most often that is not the case. Census information, though tribal rolls should be up to date, is rarely complete and accurate. Inventories of natural resources are non-existent. Though the Bureau of Indian Affairs has been responsible for the prudent management of Indian resources for many years, only recently have they attempted to provide actual resource inventories. When the tribes who now make up the Council of Energy Resource Tribes began to deal with energy development questions, they recognized their most pressing problem as lack of information about the resources they owned.

Long range goals must be established by the total community. The tribal decision-makers have the responsibility of taking the leadership and of insuring total community participation. The struggle for survival has been so acute in the past that there has been little thought given to deciding on ultimate goals and a systematic approach to achieving them. Indian communities do not have to pattern themselves after non-Indian communities either in establishing their goals or in their plans to accomplish them. Before the European invasion of this continent, Indian tribes had their own systems of government, of economic development, of international trade -- in other words, their own methods for achieving self-sufficiency. We are not recommending, for instance, that the Comanches satisfy their transportation needs as they once did by stealing horses, by raiding the closest Ford dealer but rather that those needs be recognized and planned for. Long range planning and goal setting relieves the pressure on tribal councils to take the first opportunity that comes along.

There are many opportunities. The key is to find one that will succeed because it fits into your overall plan. This rule applies to government programs as well as to natural resource or industrial development. Once you have established your goals and agreed on a procedure to attain them, you have taken the first step toward creating an environment for success.



## CHAPTER 2

### PARALLELS WITH DEVELOPING FOREIGN NATIONS: LEARNING FROM THE EXPERIENCES OF OTHER NATIONS

*"When AIO came to the Overseas Development Council to talk about the relationship between the actions of raw materials exporting countries in Africa, Asia, and South America, and Indian nations, it was very clear to all of us that there were certain parallels between events in those nations and the problems facing Native Americans."*

Guy Erb  
Senior Fellow  
Overseas Development Council

Developing countries have been largely dependent on major industrial countries such as the United States, Britain and France for development of their resources just as Indian Nations have been largely dependent on the Bureau of Indian Affairs and other government agencies. That is, they have been in a position of responding to the needs of the industrialized nations in order to try to meet the needs of their people rather than being in a position to decide what the needs of their own people are and the ways they are willing to respond to outsiders' needs in order to satisfy their own. They obviously want to change that, just as Native Americans do. Many are beginning to recognize that money or "aid" will not help much if the total relationship of rich countries and poor countries stays the same. Changes in developing countries came about largely as a result of the internal pressures from the people themselves. The people decided they were no longer going to tolerate outsiders saying "Here's what we want you to do" and began to say "No. We want to set our own priorities, then we'll come to you."

Both Indian nations and developing foreign nations are striving to gain control over their lands, their natural resources, and their destinies. One problem that both have encountered in their pursuit of economic development is the uncontrolled transfer of technology and capital which in many cases creates more problems than they solve. Harry Magdoff addressed this problem in an article, "*Capital, Technology and Development*," published in *Monthly Review* (Jan. 1976, New York). Magdoff points out that to place all of one's faith in technology or the pouring in of large amounts of capital as the means to solve development problems is

misguided. Developing countries must look to their most valuable resource — the people — and must rely on their ingenuity, resourcefulness and competence. Magdoff does not dismiss the usefulness or the necessity of technology or capital to development nor should he. But technology and capital should be and, in fact, must be controlled by the people of the area in question so that its introduction corresponds with their development goals and objectives and proceeds at a pace which will be the most beneficial for them not only economically, but culturally as well. In order for development to be an asset rather than a liability, it must be controlled by Indian people rather than by outside interests.

The introduction of a manufacturing plant on a large reservation described in Chapter Three is a good example of this premise. The tribe built the building, wage subsidies were provided through the Bureau of Indian Affairs' On-the-Job training program, and the tribe retained control of the operation. When the employees demanded better wages and working conditions and it appeared that the Bureau of Indian Affairs would withdraw wage subsidies, the plant was closed, becoming a "runaway plant." Runaway plants are not a new phenomenon. Runaway plants are commonly thought of as being a manufacturing plant which moves into a particular area because of the availability of cheap, unskilled labor. They stay as long as it is profitable and then move out without any regard to the impact on the community they leave. Many examples can be found in the South and in the inner cities. They are a particular danger to Indian nations and developing foreign nations because there is nothing to fill up the economic vacuum created. Further, they will move from one nation or region to another.

How do developing nations become developing nations rather than colonial extensions of industrialized nations?

The process begins in colonies when the people begin to see themselves as oppressed victims. They begin to question who the oppressors are. The "enemy" first is recognized as the local government personnel with whom they deal directly. Leadership develops. Communication develops between isolated groups of citizens. Rhetoric increases. The mood in the country changes to an attitude of self-determination. Political action begins. This may take the form of anything from demands for participation in the political process to work stoppages to armed revolt and bloody coups. If the colony has resources valuable to the Mother Country, there will be some effort at appeasement. As in the case of Nauru (the case study at the end of this chapter), there may be an influx of social programs designed to treat the *symptoms* of oppression — poor housing, poor health, unemployment, lack of education, etc. This is often a holding tactic — the people who are the immediate recipients of the services and the new jobs are reluctant to risk the new found improvement in their life-styles. Foreign developing nations have found a new and useful but dangerous tactic to use since World War II. That is the struggle for a balance of power between the major military powers. They are able to play one against the other as the Cubans did in the early sixties. Eventually, world opinion forces the Mother Country to make concessions and in most cases, small unindustrialized countries remain underdeveloped or undeveloped for many years. The hard process of understanding the new found political independence as opposed to their continued economic dependence on the outside world must be undertaken. There are continuing internal power struggles as a once powerless people exercises its new found power.

The most successful countries begin to develop their own technology. Japan is perhaps the best example. They closed the door to foreign investment while they learned Western technology themselves. This learning process is slow and mistakes are made in the process but it is the best and perhaps only way to master technology. Developing nations invest in the education of their best and brightest to form a nucleus of highly educated young people. This kind of elitism is offensive to some of us who think everyone should have the option of maximum achievement. Nevertheless, most of us understand the principle of playing "catch-up ball." Developing nations begin to assert their ownership and control over the development of their natural resources — particularly minerals which are almost totally held in common. This brings them to the point of dealing with outside developers.

The parallels to Indian nations are fairly obvious. Indian tribes have experienced all the frustrations of colonies seeking independence and are undergoing the same kinds of growing pains. Indian nations are,

however, seeking to compel the Federal Government to live up to its treaties and promises through which large areas of land were ceded in exchange for protection and services in perpetuity. Further, they are seeking return of land illegally taken. And they must move toward self-sufficiency with the knowledge that the threat of termination and abrogation of the treaties is very real.

Developing foreign nations dealing individually with multi-national corporations and large industrialized nations have found that they are dealing generally from a position of weaknesses, just as Indian nations have. In many cases, developing foreign nations are dealing with the same developers that Indian tribes are — and they are getting better deals. The reasons for this are hard to fathom. In these days of revelations about the activities of the Central Intelligence Agency and United States interference in the internal politics of foreign countries, one might be tempted to think our own government is providing the incentives. And they may be. There is a federally funded Overseas Private Investment Corporation which provides support for U.S. based corporations investing in developing countries. But if that worked, you would think the Bureau of Indian Affairs would work for Indians — it has similar problems.

More likely, the reason is that the developing foreign nations are dealing directly with the corporations and they are asserting their rights not only as owners but as government entities with taxing and regulatory powers.

There is a trend among developing nations to organize around economic issues. The most well known is, of course, the Organization of Petroleum Exporting Countries (OPEC). This group of countries realized that they control a large portion of the world's oil supply. By forming an alliance, they have been able to negotiate better deals bringing more money into their treasuries and generally scaring the daylights out of the rest of the world.

Indian tribes who own energy resources have realized that they own as much as one-third of all the western coal in this country plus much of the uranium, and a considerable amount of oil, gas and geothermal resources. They have formed their own organization called the Council of Energy Resource Tribes. Through exchanging information, experience and expertise and developing collective expertise to provide technical assistance to their membership, they hope to prevent exploitation and secure better deals for their people. Also important, presenting a unified front and using their collective strength, they will be better able to affect government policy and to protect their resources should they decide against development.

Tribes can learn from international associations such as the Organization of Petroleum Countries (OPEC), Inter-Governmental Council of Copper Exporting Countries (CIPEC), the International Bauxite Association (IBA) and others. They have the same diversity, the same traditional rivalries and the same internal governmental problems that tribes have. Some work better than others. There may be a point in the future when tribes or tribal associations will want to establish direct contact with those organizations.

There are other less eye-catching but equally important developments going on in developing nations which should not be overlooked and which fit with the earlier discussion of technology transfer.

A Bolivian cooperative has the specific objective of breaking from traditional approaches by placing the decision making in the hands of the people to benefit from the project.

A part of the appeal of this project is its wide membership, and general participation in decision making. It reallocates ownership and decision making, and shows that the means of achieving real social, economic, and political development is for the people to get involved in the project. This type project stresses leadership, land distribution, diversification, and creative cooperation between normally competitive groups. In other words, it attempts to forge unity among a variety of otherwise competing peoples.

Other examples of similar efforts are small scale projects which have been set up to fabricate bricks, woodcrafts, woodworking, and rural development. Each one of these small scale projects aims to maximize the employment of the people affected. They minimize capital intensive machinery because they want to employ as many people as they can. They attempt to utilize the credit available directly for the benefit of the people in the

project or to be affected by the project. They try to use local sources of raw materials and incorporate the technical advice that is appropriate for that level of the project. They are not using large machinery in most projects but rather machinery that is cheap and easily accessible. Above all, as the people develop skills in managerial techniques they become interested in the decisions, in where the power resides, and in who is going to control new projects. The power then tends to shift to those communities that are affected by the money that's being disbursed.

No peoples will ever be truly free unless they themselves control the development of their own resources whatever they are. Those in power will never give it up easily; it must be taken and it must be exercised wisely. Or it will be lost.

## APPENDIX A

### AN AIO CASE STUDY

#### THE PACIFIC ISLAND OF NAURU: A PARALLEL FOR INDIAN NATIONS?

Economic Self Sufficiency and Sovereignty

By: Sherry Horosko

#### *Nauru Fact Sheet*

- Nauru is an oval-shaped island about 12 miles in circumference containing 8.2 square miles (5,263 acres). It lies by itself 33 miles south of the equator, at E. Longitude 166.6 degrees.
- Nauru is one of three great phosphatic rock islands of the Pacific. The value of this phosphate rock is beyond computation.
- Approximately four-fifths of Nauru is phosphate bearing.
- Temperature in the shade ranges between 76-93 degrees F., and the average humidity is between 70 and 80%. The average rainfall is 80 inches.
- Population totals approximately 7,000 of which 3,300 are indigenous Nauruans.

*Education:* It is compulsory for all children between 6 and 17, if Nauruan. There is only 5% illiteracy.

*Religion:* 43% of the Nauruans are members of the Nauruan Protestant Church.

*Political Status:* Nauru is a republic with special membership in the Commonwealth of Nations, and may partake in all commonwealth activities, except attendance at meetings of Commonwealth heads of government.

*Government:* Nauru has a unicameral Parliament, which is composed of 18 members popularly elected for a three year term. The Parliament selects the President from its own members for a term corresponding to the life of Parliament itself. The President in turn appoints four of five members of Parliament to serve with him as a

Cabinet. The Judiciary consists of a Supreme Court and a District Court. The Island is administratively divided into 14 districts, which are re-grouped into eight districts for electoral purposes.

*Foreign Relations:* No formal diplomatic representatives abroad except for representatives in Australia and the United Kingdom. It has declined to apply for membership to the United Nations Economic Commission for Asia and the Far East.

There are certain similarities that exist between developing nations and American Indian tribes in terms of natural resources and violations of trust responsibility. By studying what emerging nations have done, we can often gain a better understanding of what options exist and what tribes can demand and receive in terms of developing their resources.

The Pacific Island of Nauru is very similar to many Indian reservations in terms of area, population, and resources. How this nation has achieved economic self-sufficiency and consequently, sovereignty, could offer many hints to Indian tribes in achieving the same goals.

“The attainment of independence by the Nauruan people has a wider significance, for it shows that where economic and social circumstances are favorable, the attainment of legal sovereignty need present no insuperable problems.”

—Nancy Viviani

After a twenty year struggle for sovereignty the tiny island of Nauru achieved its goal, thus becoming the world's smallest republic. Without the determination of the Nauruan people, and their perseverance in controlling the development of their multi-million dollar phosphate deposits, these people would still be exploited by foreign nations today. The obstacles Nauru surpassed serve as an example to other peoples who are rich in mineral resources and who hold sovereignty as their ultimate goal.

In 1947, Nauru was made a trust territory under the protection of the Trusteeship Council of the United Nations. Australia, Great Britain, and New Zealand were designated as the Administering Authorities with Australia having direct responsibility for Nauruan growth in matters of political and economic concern. The trusteeship agreement stated:

“The interests of the inhabitants should be of paramount importance . . . that the Administering Authority, accept as sacred trust the development of self-government of the people of the Trust Territory.”

Australia was required to educate the Nauruan people on administrative and economic development. However, Australia chose to postpone if not stultify such development for purposes of continued exploitation of the Island's phosphate by the British Phosphate Commission (B.P.C.). The welfare of the Nauruans was superseded by Australian self-interest, thus flagrantly violating the trusteeship responsibility. The incalculable worth of Nauru's phosphate rock did not provide the Nauruans with any of the social or fiscal benefits that such a valuable resource should render.

Most Nauruans were employed in minor clerical positions or as student teachers. All administrative positions were held by Europeans. The Public Service Board on Nauru was controlled by the Public Service Board in Australia, and every position of executive importance was managed by an expatriot. These men served two or three year terms without knowing anything about Nauruan affairs. The Nauruan people were aware that nothing significant could be accomplished unless they began to assume administrative positions. Nauru requested that the United Nations Visiting Mission conduct an inquiry into the matter. Shortly thereafter, at the recommendation of the United Nations, the Nauru Local Government Council Ordinance was enacted (1951).

This Ordinance did not afford Nauru any real political power. The Council was permitted to appoint district constables to keep the peace among the Nauruan people, to enter into contracts and businesses, and to

provide social and public services on Nauru. Under the Ordinance, the Council was empowered to advise the Australian Administrator on Nauruan affairs, but the Administrator had no obligation to approve rules made by the Council to conduct its business. Also, the local government's estimates of revenue and expenditure were subject to administrative approval. The Nauruans complained about their lack of power, but the Australians replied that the Nauruans did not have the capacity to comprehend the full powers of the ordinance.

By 1956 the Nauruan people were still without any major voice in their own affairs. There were, however, some very significant strides made through Nauru's determination in other areas. The Nauru Royalty Trust Fund, established in 1951, was accredited to the Local Government Council's expenses when the administering authorities agreed to pay for Nauruan education. The Council used these extra dollars to take over the administration of the Nauruan Housing Plan and increase social services. In 1953 the first strike in Nauruan history took place; this resulted in the formation of the Nauru Workers Organization, a trade union aimed at improving wages and working conditions. In three short months the union succeeded in nearly doubling the basic wage.

Indigenous people have nearly always been victims of the superiority mentality of their host "benefactors." The Australia-Nauru relationship was no exception. There were substantial differences in rates of pay received by Nauruans and Europeans for the same kind of work. Nauru petitioned the United Nations Visitation Mission in 1956, charging that working hours were discriminatory and general wage conditions unsatisfactory. They demanded that equal pay for equal work should be adopted by employers. Australia tacitly asserted that Nauruans did not work hard enough. The Nauruan's efforts had their partial reward in 1961. A uniform working week of forty hours for administrative employees was introduced. The basic wage was raised from \$12.20 to \$18.70 per day. Some of the conditions persisted: there were no margins for skill or length of employment, and no sickness benefits. These concerns coupled with a growing dissatisfaction with miserably low royalty rates for phosphate provided the impetus for a full scale push for a new Nauruan identity.

To understand the significance of Nauru's attainment of independence it is necessary to examine Nauru's role in the phosphate industry. Following World War II phosphate land was leased to the British Phosphate Commission. The Nauruans received 13¢ per ton for their phosphate, of which 6¢ per ton was a direct payment to surface landowners. The remaining 7¢ per ton was invested by the Administration Authority in various Nauruan Trust funds. The 13¢ per ton royalty rate was preposterous in light of the fact that the value of phosphate had risen by 200% without a comparable increase in costs since 1940. Despite the rise in value, Nauruan royalties had increased as a result of pressure exerted by the Phillipine and Soviet representatives to the Trusteeship Council. The royalties were increased from 13¢ per ton to 16¢ per ton which was still less than 6% of the total value of the phosphate.

The argument for such low royalty rates was apparently based on the trustee's belief that payments to Nauru should be governed by present and future needs and not by any fluctuations in the price or value of phosphate. This viewpoint implies two things about the trustees. First, Australia's assessment of Nauru's needs was apparently based on the belief that an "aboriginal" people is not concerned with altering the status quo or improving social and economic conditions. Second, so long as Australia could determine Nauru's future needs, the trustee was able to establish the royalty for phosphate that it viewed as beneficial to the trustee and not necessarily to Nauru.

Australia's vision of the Nauruans as a primitive people with little motivation for change or advancement was not well founded. By 1956, the concern with royalties intensified. The f.o.b. price of phosphate exported had increased 2½ times since 1939, being \$4.20 per ton. The royalty increase had not been proportionate. Between 1922-1955 the Nauruans received \$1,652,256 while the total value was \$54,630,993. In 1959, Nauru asserted that the only manner of getting the best terms possible for phosphate was to put Nauru in a position in which they owned the phosphate and developed it in their own interest; that is to say, no leasing to other companies, no minimum royalty payments, but control over their own industry!

In 1963, at another royalty conference, the Australians offered a 50% increase in royalty rates, but Nauru refused this offer (without the aid of legal counsel) holding to the principle that royalties should form a fair share of phosphate proceeds. Nauruan phosphate was about half the f.o.b. price of Makatea (French Polynesian) phosphate. As a result of this, Nauru maintained that their fair share of phosphate proceeds should amount to a royalty in the region of \$7.14 per ton.

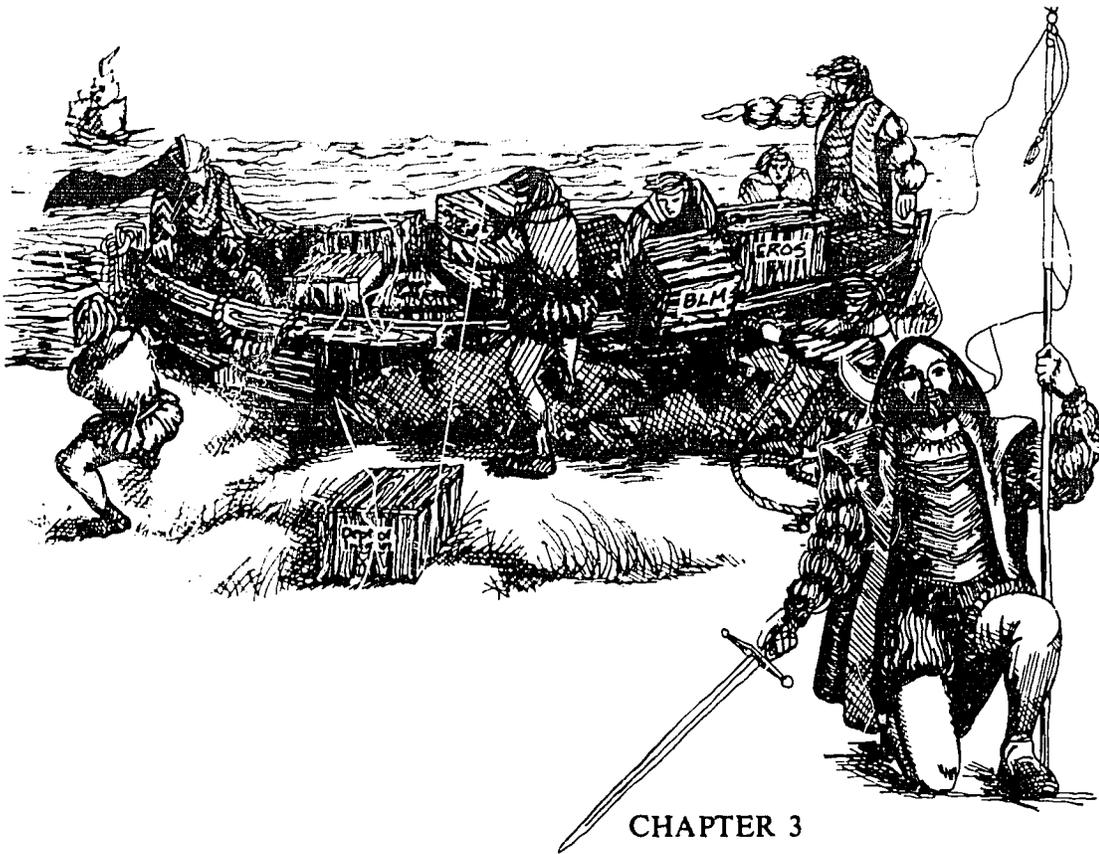
At the 1964 conference, Nauru asked that formal steps be taken to transfer legal ownership of the phosphate to the Nauruan people. This, of course, was rejected by Australia. A year later Nauru engaged legal help. It was determined that the British Phosphate Commission was charging \$5.36 per ton rather than the market price of \$14.76 per ton. The failure of the B.P.C. to charge a proper price resulted in loss for the Nauruans. The exposure of the Trustee's colonialist policy in a world sensitive to actions of imperialism and neo-colonialism resulted in public embarrassment for Australia, Great Britain, and New Zealand. Royalty rates were thus increased with a future plan to give the Nauruans a 50% interest in the phosphate industry. The fixity of Nauruan purpose was beginning to pay off. In 1966, Nauru had its first general election for the legislative and executive council. Their first business was to examine avenues of independence. The target date for sovereignty was set for January 31, 1968.

The Nauru Phosphate Agreement of 1967 marked the beginning of Nauru's economic independence. Phosphate was to be supplied exclusively to the partner governments (Australia, Great Britain, and New Zealand) at the rate of 2 million tons a year while the governments undertook to supply an assured market for this output at the agreed price of \$11.00 per ton for three years, at which time the rate would be subject to market fluctuation. More importantly, the Nauru Local Government Council was to buy capital assets of the industry for approximately \$20 million, of which \$9 million would be paid in 5 years beginning July 1, 1967. For the three years following 1967, the B.P.C. would manage the phosphate operations and prepare to transfer management to the Nauru Phosphate Corporation. The net profit of the industry would be paid to the Nauruans.

In the three years since the 1964 talks when the Nauruans had rejected the 50% royalty increase, they had attained total control of the industry. Previous to control of their phosphate deposits, Nauru had leased the land for a royalty rate of 13¢ per ton for its phosphate. The capital assets of the B.P.C. were purchased and an investment fund for Nauru was established that will total 400 million dollars in 30 years.

Despite the fact that Nauru probably has the highest per capita income in the world, the lonely island in the Pacific is not without its problems in the years ahead. The phosphate deposits on Nauru will be entirely depleted by 1990, leaving the island with the possibility of no further natural resources for development or prosperity. The remaining areas may be insufficient to support its growing population, and reclamation of the island is believed to be more expensive than the money obtained from phosphate sales will provide. Nauruans face the options of assimilation into Australian life, finding a new island on which to live, embarking on a costly process of reclaiming Nauru, or using their present assets to develop other economic options on the Island.

Sovereignty is more than precious to the Nauruan people. The years of determination have been rewarded with independence, control of their internal affairs, and management of their own natural resource. In turn such economic self-sufficiency has enabled the Nauruans to maintain their heritage, culture, and identity; all gifts which will not be easily sacrificed to the "assimilation alternative." But if the past achievements of this nation are any reflection of the strength and character of a people, then the Nauruans may find their way through this foreboding dilemma. Whatever the outcome, the people of Nauru will shape their own destiny, giving hope to other peoples with a dream of independence.



### CHAPTER 3

## BARRIERS TO DEVELOPMENT

*"Federal Indian Policy is much like Columbus. He didn't know where he was going. When he got there, he didn't know where he was. And when he got back, he didn't know where he had been"*

Anonymous

In a society where land ownership has traditionally been synonymous with wealth, the group which holds the largest blocks of privately owned land are the poorest, American Indians. Why?

From the beginning of the European invasion of this continent, the control of the development of the land and its natural resources quickly passed from the control of the Native Peoples to a series of outside governments. Even after the establishment of the United States government and the subsequent recognition of Indian nations as domestic sovereign dependent nations under a special trust relationship, Indian nations have been under the domination of outside control. Development has been permitted only at the discretion of — and often, the whims of — federal officials. The attitude most often reflected has been that of a dictator, sometimes benevolent, with a series of social welfare programs designed, first to isolate, and then, to assimilate Native Peoples.

Tribes have learned through experience that dollars are more likely to come through the art of learning what granting agencies are funding rather than in new innovative programs and long range planning to meet the particular needs of their community. For instance, a few years ago, industrial parks were heralded by several government agencies as the answer to economic development on reservations. As is common, the responsibility for making Indian programs work was spread over more than one agency. In this case, the Department of Commerce Economic Development Administration was responsible for building the parks and the Department of Interior, Bureau of Indian Affairs, was generally responsible for attracting industry to them.

According to a report to the Congress by the Comptroller General of the United States entitled "Improving

Federally Assisted Business Development of Indian Reservations" dated June 27, 1975:

"To induce businesses to locate on Indian Reservations, EDA spent about \$16 million from 1966 through 1973 to provide industrial parks on 33 reservations. According to EDA statistics, on May 30, 1973 the average occupancy rate of the 26 completed parks was about 17 percent of the total improved acreage. Only 2 parks exceeded 50 percent occupancy, 5 parks had no tenants and 11 parks had only 1 tenant."

The Report, which discusses the effectiveness of Federal efforts to improve economic conditions on Indian reservations by four agencies, the Departments of Agriculture, Commerce, Interior and the Small Business Administration, concludes that a lack of coordination between the various agencies is a major stumbling block to development on Indian reservations. Though it does not specifically say so, the implications are that the agency efforts deal almost exclusively with non-Indian developers. The parks were supposed to serve as incentives for manufacturers to open new plants on reservations.

In fairness to the agencies involved, it should be noted that the building of industrial parks is a standard practice for attracting industry to states and cities. It should also be understood that the tribes did request industrial parks and that they did so in response to the fact that funds for industrial parks were available. As is true in many other areas, what is good and acceptable in a non-Indian community is not necessarily good for Indians.

### **Federal Policy**

The policy of the Federal government itself (or its lack of a consistent or coordinated policy) has tended to prevent Indian tribes from controlling the development of their own resources. The following is a compilation of problems identified by tribal leaders:

1. *There is a basic conflict of interest within the Department of Interior which pits the trust responsibility to Indians against the other agencies within the Department with missions for development which conflict with the best interest of Indians.* This conflict is recognized and reiterated in the Federal Trade Commission's Bureau of Competition Staff Report on Mineral Leasing on Indian Lands, published in October 1975.

2. *There is a lack of basic information about tribally owned resources.* Most tribes lack any real resource inventories. At the same time, outside developers seem to have access to or from technological means not known or not available to tribes. For instance, the National Aeronautics and Space Administration has developed an Earth Resources Observations System (EROS) with a Data Center and Applications Assistance Facilities located around the country. EROS is a program of the U.S. Department of Interior, administered by the U.S. Geological Survey. The U.S. Geological Survey is also the agency charged with providing expertise and technical assistance to the Bureau of Indian Affairs and Indian tribes. Data is collected from satellites and aircraft aerial photography and fed into computers. The equipment used is so sensitive that it can distinguish between different varieties of corn being grown side by side as well as for pinpointing mineral deposits. The value of this data for both the BIA and the tribes is obvious both in resource inventory and in management of resources such as water, timber, range and agricultural lands. It is paid for with Federal money and administered by an agency which includes in its mandate "major responsibility for American Indian Reservation communities." The information is available at a relatively minimal price to the general public. Yet, it has not been furnished to the tribe nor, it seems, to the BIA, which furnishes the U.S. Geological Survey with a sizeable amount of money to provide expertise and technical assistance to Indians. Further, since the Department of Interior and the Bureau of Indian Affairs have been charged with the trust responsibility for prudent management of Indian lands for many, many years, it is inexcusable that they are only recently seeking to provide inventories of resources on Indian lands. Even more reprehensible is the fact that tribal resource inventories presently being done by the U.S. Geological Survey are sometimes being done without the knowledge and participation of the tribes. Further, the tribes who are aware are distrustful of the accuracy of the information being collected and understandably concerned that it will become public information rather than proprietary information for their use.

3. *Government funding programs are not coordinated to work together.* Each agency touts its own programs to those tribes it wants to fund or pushes those that seem "too hard" or have no appeal, to other agencies. For example, one tribe reported that they had been told that the Economic Development Administration would not fund a farming project because it was the Agriculture Department's job; Agriculture would not fund it because they considered tribal operations as corporate operations; the Bureau of Indian Affairs would not fund it because they said the Economic Development Administration was supposed to fund that kind of project; the tribe couldn't get a loan from the bank because they couldn't use the land as collateral. There seems to be a "territorial imperative" involved in that each agency wants to get credit for successes and point their fingers at "failures." This is understandable when you realize the competition for funding at appropriations time. Related to this syndrome is the tendency of agencies to respond to "successes." If a tribe is able to get something going that looks like it is going to succeed, as in the case of the Mescalero Apaches, Mississippi Choctaws, Quinaults, or the Colorado River Indian Tribes, has a nationally visible leadership and masters some political support along the way, the agencies will fall all over themselves to pour money in. Everybody wants a piece of the action. Those groups who lack a track record and need the most help or who want to try a totally new approach, are up the proverbial creek without a paddle.

4. *Feasibility studies are either inadequate or nonexistent.* If an agency wants to fund a project and the feasibility report shows it to be impractical, it may fund it anyway, then the tribe is blamed for its failure. Specific examples were cited by the tribes. Those cases usually occur when a tribe had gone to an agency with a small project and was encouraged to expand it beyond their capabilities, or when it went with a large project and reduced it at the direction of the agency to meet funding limitations. The Comptroller General's Report referred to earlier also gives specific examples.

5. *There is a lack of expertise within the Bureau of Indian Affairs to deal with new forms of development.* That is, if a tribe proposes anything outside the scope of the standard lease agreement, there's no one with the expertise to deal with it. Consequently, the burden of selling a new idea is always on the tribe, which often lacks the experience, expertise and the dollars to fight the bureaucracy of agency, area and national offices. Since the likelihood of having expertise needed is less at the lower levels, agency and area offices often act as stumbling blocks either out of fear of change or out of lack of knowledge. An example of this problem is the Navajo-Exxon uranium agreement. The tribe negotiated its own agreement with the company without prior BIA approval by the trust Officer. It took four years to gain approval. Standard lease form agreements, on the other hand, have been routinely approved. The Commissioner of Indian Affairs addressed this problem at the Great Lakes Seminar.

The Commissioner pointed out that many changes in ideas about resource development on Indian reservations are coming about. Whenever change is created, both anxiety and hope are created. Such is the case in the Indian community and in the Bureau of Indian Affairs. As tribes develop an increasing awareness of the alternatives for development of their resources and a growing sophistication in understanding the trust responsibility, the federal government is challenged to change its responses. As tribes explore the meaning and ramifications of self-determination, the federal government is called to account for its past actions and is forced to gear up to meet an expanded view of its responsibility as a trustee, a responsibility not only to protect tribal resources but to insure that they are managed prudently and in such a way that the tribes receive maximum benefits. For example, while some tribes are handling their own negotiations with outside developers, other tribes are suing the federal government for previous actions which are now recognized as harmful to their interests taken under waivers of regulations. An example which illustrates this point is that of the Navajo and Northern Cheyenne tribes. While the Navajos were attempting to get a tribally negotiated contract for development of their uranium approved which would require a waiver of the regulation requiring competitive bidding, the Northern Cheyennes were attempting to void leases for coal development partially because the leases violated the government's own regulations. The Federal Trade Commission report referred to earlier recognizes this problem also.

6. *An inordinate amount of time is spent processing proposals through government agencies.* How quickly you

get an answer depends on the efficiency and dedication of the individual who is assigned to your project, the personal interest of the administrator in charge, your political clout and your "nuisance potential." Whether you get an approval or not depends a great deal on your skill at establishing a relationship with the administrator and the project officer, your ability at using political pressures carefully and wisely, and your persistence.

7. *Money from government programs does not come in on time.* Getting your program approved is only the first of many problems. After approval, you go through another series of frustrations while you wait for the money to arrive. You may have a starting date for a project — the date you are expected to begin work and a time for which you must report on progress toward your goals, but your first cash may not arrive until three to six months later. If you don't have available unrestricted cash, that is, money not specifically allocated for another government program, how can you start your program? If you "borrow" money from other government programs, you are in trouble for co-mingling funds. Your alternative is to borrow money from the bank against the money which will be received; however, when your government money does come in, you can't use it to pay the interest on the money you had to borrow.

The time lag between funding cycles for on-going programs is a related problem. Suppose you have a project which will run for two, three or five years. Often you are not notified whether it will be renewed until very late in the funding year or until your final report for the first year works its way through the bureaucracy. Though you are expected to continue your work, beginning your second year's obligation, your new funding again may be delayed for three to six months. The government officials responsible for processing your papers may not recognize the urgency of your needs because their paycheck comes every two weeks regardless.

8. *Efforts of the Federal agencies dealing with development have focused on non-Indian developers whether it be industrial development or development of natural resources.* A prime example of this phenomena occurred a few years ago when the Department of Commerce and the Bureau of Indian Affairs became concerned about the empty industrial parks on Indian reservations. They invited a group of industrialists in to discuss the problem. Indians were not invited. A corporation president with some sensitivity to Indian self-determination (who happens to be on AIO's Board of Directors) asked why, both at the meeting and later in correspondence; he felt that he was ignored.

The introduction of a manufacturing plant on a large reservation is a good example of the focus on non-Indian developers. The need for jobs on the reservation was critical. In order to attract industry — jobs — to the reservation, the tribe with government assistance provided the building and equipment for an electronics assembly plant to be built on the reservation. The company, for their part of the deal, provided management, raw materials and marketing, — a relatively minimal investment. They also agreed to hire tribal members on condition that the Bureau of Indian Affairs provide wage subsidies through the On-the-Job-Training program for them during their training period. The plant was located on the edge of the reservation. Transportation was not readily available. The result was that employees had to locate temporary housing in the vicinity where they lived during the week because they did not move their families to the job site. Further, many were women. The cultural and sociological patterns of the tribal members affected were totally disrupted. The Bureau of Indian Affairs poured thousands of dollars into wage subsidies — enough so that every man, woman and child on the reservation could have been trained for periods far exceeding the maximum recognized training period of nineteen weeks. Perhaps that would have been forgivable had there been another market for their skills within half a day's drive, but there wasn't. Workers were paid less than the minimum wage, had no control over their working conditions and were generally exploited. The Bureau of Indian Affairs finally got around to notifying the company that people were beginning to ask questions and that both the BIA and the company would have to clean up their acts. Shortly, thereafter, the plant was taken over by disgruntled workers and members of a "militant" organization. During the occupation, documents were found indicating that the company had started negotiations to move the operation to Korea, thus becoming a "runaway plant." Runaway plants are not a new phenomenon. Runaway plants are commonly thought of as being a manufacturing plant which moves into a particular area because of the availability of cheap, unskilled labor. They stay as long as it is profitable and then

move out with out any regard to the impact on the community they leave. Many examples can be found in the South and in the inner cities. They are a particular danger to Indian nations and developing foreign nations.

A study of the use of Indian On-the-Job-Training funds shows a concentration of support to non-Indian developers. The large amount of farming and agricultural lands leased to non-Indians is another indication. The standard lease form used for mineral leases and the timber sales contracts are, according to our experts, "lessor's leases"; that is, written to the advantage of the lessor rather than the owner.

9. *Regional and area offices often act as stumbling blocks rather than as facilitators for Indian programs.* Tribes are reluctant to report troubles because of the threat, real or implied, of termination of funding. Further, policies are not consistent from region to region or area to area. The Indian Self-Determination Act, which was meant to make contracting for tribal provisions of present BIA and Indian Health Service provided services easier, is the subject of many new concerns. Bureau of Indian Affairs personnel understandably see tribal contracting as a threat to their jobs, yet they are the same people charged with the responsibility to help tribes contract. It takes a very generous and dedicated person to resist the hope that tribal contracting will fail and to resist the temptation to make it as difficult as possible. Perhaps it is too much to ask. There are provisions, of course, for including those people in the tribal contracts. Here again, human nature comes into play because, for years, those people have had power over the tribes they serve simply because they controlled the services they received. Reversing the positions of power is bound to cause great emotional conflict — in other words, do a real number on your head! There is no doubt that some individuals will be hurt in the process. They should not be the people of the tribe.

10. *There is a lack of legal and technical advice from experts that tribes can trust.* Tribes have no confidence in government provided legal and technical expertise. Past experience has proved that it is not in their best interests to trust advice from these sources. If it were, then the problems would not be so great today. There is a great need for money to be provided with which tribes can purchase their own expertise.

11. *The relocation program of the 1950's (wherein tribal members were encouraged and, in effect, forced off reservations into urban areas) has caused great internal pressures within the tribes as tribal members reassert their Indianness and return to reservation communities.* The Federal Government, in its infinite wisdom, devised a program to relocate reservation Indians into urban areas in response to the poor economic situations on reservations. Rather than improving the economics of Indian families, they found themselves thrust into a foreign community without the reinforcement of their tribes and quickly moved from being economically poor on reservations to being the poorest in the inner cities. Again, the Federal Government, in its infinite wisdom, decided that since those Indians had left the reservation, they were no longer Indians and terminated services to them. This policy created an artificial conflict between tribal members in urban areas and those who stayed on the reservation by setting into motion an intense rivalry for already scarce funds for social services programs. The injustices of Federal policy and the new indignities forced upon Indian people in the cities, gave rise to a new political force in the Indian community. The so called militant organizations, for example, were first formed as a method of mutual protection in urban areas. Such groups began to call attention to the injustices that have been perpetrated against all American Indians. This new consciousness-raising movement deserves a great deal of credit for the Indian renaissance of the last few years. As the Indian community began to read in newspapers, as well as see on television, that other Indians were asserting themselves and putting the blame for their poor economic conditions, discrimination, etc., on the society and the Federal Government, Indian people began to turn their feelings of anger and frustration outwardly rather than inwardly. They began to express themselves as a people of value and with values worth keeping and nurturing, and a rekindling of spirit and a new determination was born.

On the reservations, there also developed an understandable resentment of the attention being received by this group of "upstarts" on the part of leaders who had been saying the same kinds of things for many years, and who had worked diligently and largely without recognition within the system, to bring about change. Many of

this new group had left the reservation at a very early age with their parents or perhaps were born in the cities. How dare they purport to speak for Indian people — they had been assimilated. A third group, Indian people who had been “assimilated”; that is, had “made it,” perhaps through non-Indian educational systems, and were functioning as members of the larger society, also began denouncing their so-called assimilation and reasserted themselves as Indians.

The larger society then played another trick on Indian people. Any act of assertiveness was called militancy. Any act of militancy immediately identified you as a trouble maker. The Federal Government and the larger society, no longer able to ignore the conditions Indian people had to live in, began to look around for more conservative voices to deal with. And they began to play Indians off against each other. As usual, the method is money. When the Office of Economic Opportunity was created in the early sixties, the government, after much pushing, established an Indian Desk (now the Administration for Native Americans in the Department of Health, Education, and Welfare) to address the needs of all Indians — those living in urban and off-reservation areas, as well as on reservations. Truly militant and sometimes violent actions of some off-reservation people began to scare the Feds. Reservation leadership, anxious to reassert their leadership roles, were angered by this new recognition. There were pressures from those people still on the reservation to improve conditions at a faster pace. Tribal leadership began to demand a larger share of these new programs in addition to the inadequate old programs of the Bureau of Indian Affairs. The Indian people living off reservation began to say “Okay. You share ours. We share yours.” The fight was on — divide and conquer rides again.

Perhaps the exposure to the larger society has taught those living off reservation to read the trends more quickly. Perhaps being thrust into a survival situation outside the Indian community sharpened their sense of survival. Perhaps the continual frustration of dealing with an alien society has simply made them tired. Perhaps it is a reborn sense of identity and a seeking of reinforcement from family and friends. Whatever it was or is, there is an overwhelming urge to go home. The urge to go home is accompanied by a knowledge that going home does not have to mean that you accept unacceptable living conditions — that you can be Indian without accepting poverty, poor health, poor housing, etc., as an unchangeable way of life. They go back determined to make things happen.

Meanwhile, back on the reservation, they are often treated with fear and disdain. What has happened to these children, forced out of the nest and raised in an alien society? Are they still Indian? Can they be trusted? Are they going to bring down a new reign of terror from the white community as the “renegades” of the past did? And does their desire for change mean that they do not understand and value the hard work and dedication tribal leaders have long devoted to the survival of their people?

Thus, once again the tribe has to find a way to deal with problems it did not create.

Perhaps it is small comfort to tribal decision-makers who must deal with this complex problem, but there is a similar phenomena in developing nations. Perhaps it is most important to recognize it as growing pains that come when any “powerless” people begin to exercise power.

Tribal decision-makers should take the lead in healing those wounds inflicted by the Federal Government’s divisive policy. There is strength in numbers. Government programs are often based on numbers. Recognizing that tribal governments have a responsibility to their members wherever they are for the provision of the basic purposes of government, protection and provision of services, and acting accordingly is in the best interest of the tribe. Some tribes have faced up to this issue and have worked hard to maintain contact with their people off-reservation. They have made provisions for them to participate in tribal elections. They have helped establish and supported efforts to establish service centers for their people in urban areas. Some have made arrangements for their off-reservation tribal members to receive health and scholarship benefits. They have had the courage to defy the Federal Government’s policy of termination through administrative decision.

Tribal decision-makers should recognize the problems that have been created by the Federal Government in

classifying Indians to suit their own purposes. Urban, state-recognized, unrecognized, and federally-recognized classifications were not created by Native Americans. They were created by the Federal Government and have been used to set Indians against Indians, draining their energies rather than allowing them to concentrate and spend their energies to fight their common enemies and solve their basic problems. There are not enough dollars to go around now, but if the same energy that is spent fighting over them was spent fighting for enough dollars for everybody, who can guess what could be accomplished. Tribal decision-makers have been smart enough in the past to deal with problems created by outsiders and to survive as a people. They must recognize the new ones, face up to them and find their own solutions.

### **Internal Barriers**

There are internal tribal barriers to Indian control of economic development as well. Some may be directly traced to federal policies; however, tribal decision-makers must not make the mistake of simply pointing their finger at someone else and ignoring the steps they must take to clean up their own nests.

1. *Many tribes are still operating under tribal constitutions that were imposed by the Federal Government years ago.* Though they are primarily non-Indian in design, and bear little relationship to the traditional methods of government, they have become "sacred cows" and any attempt to amend them is met with great hostility. Often tribal constitutions are simply ignored until one faction or another decides to use it against the other. Tribes had systems of governing themselves long before Columbus stumbled onto this continent. Some of those systems may seem repugnant in these days of "democracy" and stress on individual rights. However, we should not forget the purpose of government — why people join themselves together in bodies — that is, to provide protection and opportunity for a better life. It is unrealistic to think that tribal systems of governing or tribal cultures would have been the same today as they were in 1492 had the white man never set foot on this continent. They would have changed as the needs of the people changed. The good things, the things that worked for the people, would have been retained and built upon.

It is important to remember that tribal governments were evolving, living structures. They dealt with protection and preservation while at the same time, they dealt with providing opportunities for each member to be a contributing valued member of the society. There were punishment systems. There was international trade and cooperation or warfare between Indian nations. These systems were disrupted by the influx of Europeans. It is difficult to project where natural evolution would have led because of that disruption.

Though there is no way to go "back to the buffalo" there is no reason not to hold onto or go back to the basic tenets that helped your tribe survive as a people. If there is one basic assumption that can be made about tribal governing systems before Columbus, it is that everybody in the tribe knew what it was. That is not true today and it should be. Tribal governments should not be drawn into the governance in secret syndrome.

The Secretary of the Interior must approve tribal constitutions; however, in these days of self-determination, he will be hard pressed to disapprove one that has the support of the tribe. And, there's always the tricky way — a clause that says failure to disapprove within a given period of time, thirty days, sixty days, ninety days, constitutes approval.

2. *There is a lack of stability in tribal governments which may be real or may be perceived by potential developers.* This causes a reluctance on the part of the developer to invest in development on Indian reservations. Tribes must re-examine their own structures considering such questions as continuity, length of terms of office, personnel policies, business structures protected from political interference, etc.

3. *There is a lack of separation between the tribal government and the tribal resource development administration.* Should tribal councils be engaged in setting policies and procedures or should they be involved in the day-to-day operations of a tribally owned business? These are inherent conflicts of interest that should be dealt with openly. One argument is that while it makes ultimate good sense to elect your tribal council, it hardly makes

sense to elect the manager of your sawmill or your grocery store or your motel. On the other hand, a person who might be an outstanding member of the council might be the person best qualified to manage your sawmill or your grocery store or your motel. One rule of thumb that should be kept in mind is that any business that is run like a governmental agency is doomed to failure whether it be tribal or federal. The post office is a prime example. This is not a criticism of tribal governments — they are not businesses, they are governments, and should operate as governments. Neither can businesses be run like federally or state funded programs or foundation programs.

This problem will become even more complex as tribes actually begin to develop their own resources. It is one thing to supervise the implementation of a coal lease and quite another to run a coal mine. The local community must devise its own method for insuring that the daily operation of business enterprises are not subject to political interference but, at the same time, are subject to tribal policies.

4. *There is a lack of trained Indian personnel to run tribal enterprises from the technician through the management levels.* Educational programs, vocational and professional, must be re-examined to insure that the kind of expertise needed by tribes will be available and tribal members must be enticed to secure those kinds of skills.

5. *Tribal codes and infrastructures are largely inadequate to deal with new problems associated with economic development.* Any major development, whether it is tribally owned or operated by outside developers, is apt to bring in an influx of non-tribal members. This is true whether it be a motel or recreational facility or a uranium mine. Does the code cover jurisdiction over non-Indians or non-members of the tribe? Are the courts and detention facilities adequate for dealing with them? Does the code cover criminal misdemeanors, civil matters such as repossessions of property, marriage, divorce, juvenile justice, zoning land use, and environmental protection? Care should be taken that tribal codes are not so adapted to the non-Indian system that it simply makes it easy for those trained in non-Indian law to disrupt the tribal system. As the time comes when non-Indian attorneys come in to Indian courts, there is something to be said for having them as confused by Indian laws as Indians are in non-Indian courts.

6. *There is a lack of capital for tribal investment.* Too often tribes are prevented from exercising control over the development of their own resources by a lack of capital. This is an overwhelming but not insurmountable problem. Natural resources such as timber, coal and the land itself are sources of capital. Even though the land itself is not mortgageable, a lease-hold interest is, as some tribes such as Ak Chin have learned.

7. *There are monumental heirship and ownership problems with allotted and assigned lands.* We can surely blame the Allotment Act for the root of these problems but the practice of administrative assignments may be even more devastating. While allotments are recognized as an invention of the Federal government, assignments were ostensibly made by tribal governments (though if you look closely, you will detect the fine hand of the Bureau of Indian Affairs) and have come to be viewed as "traditional" and therefore unquestionable. As long as tribes were basically self-sufficient, that is, hunted or grew their own food and other necessities, these territorial problems were relatively unimportant. Any tribe which plans to control its own resource development must surely deal with these questions. This is the area where individual rights most often come into conflict with tribal rights. There is legislation under consideration by the Congress now. Tribes should carefully consider whether they can handle the question themselves under their tribal constitutions. It would seem that there would be a possibility to use "eminent domain" even as distasteful as that might be. Tribally chartered corporations of allottees which contract with the tribes for management might be another possibility. This government-created problem will no doubt be the most difficult to deal with.

8. *There is little long range planning for the relationship between individually owned enterprises and tribally owned enterprises.* What should be tribally operated and what should be individually operated? Should tribal members operating businesses on assigned or allotted lands pay for the privilege, a tax perhaps, or a set fee? It seems logical that members of a community who receive services — police protection, water, or whatever —

should expect to contribute to the general welfare. Each reservation will have to work out its own system.

9. *There is both a fear of failure and a fear of success.* Change is frightening and past bad experiences tend to make tribes fear trying anything new because it might not work and they will be criticized for failure. On the other hand, there is a fear that if you are successful in making your tribe self-sufficient you will be terminated, as the Menominees and others were. Consideration must be given to whether it is better to effectively terminate your children by making it economically impossible for them to survive on your reservation or to make your reservation self-sufficient and face the possibility of termination of government services when and if it comes.

10. *There is a lack of fiscal accountability in many tribes. That is not to say there is a lack of fiscal responsibility, although in some cases that, too, is true.* What is fiscal accountability? Very simply, it is an organized method of documentation of the way you spend your money and a reporting system to those you are accountable to. Your first responsibility is, of course, to your people. They have a right to know how much money the tribe receives and how it is being spent. So do the people who fund you. That does not mean that the tribe should meet in general session to decide how much should be spent on paper clips and tissue paper. It merely means that a budget should be established and approved and that documentation of expenditures within those guidelines be maintained and made available to your membership. In the case of government programs or foundation programs, you have to document that your money was spent within the guidelines to accomplish the things you said you would when you took the money.

Fiscal responsibility is, simply put, acting in a responsible way to see that the money available is used in the best interests of your people. For example, on a personal basis, if you take your paycheck and tell your spouse and your children you are going to spend it all in the local tavern and do so and take home a receipt for it, you have maintained fiscal accountability, but you could hardly be called fiscally responsible. By the same token, if a tribal council is able to get approval of the tribe to spend \$200 a day for per diem and does so, they are open for serious criticism.

More often the choices are not so clear cut. It may be, for instance, that there is no money in the budget for buying such things as food or clothing for people in need. A child has no shoes and it's wintertime. It's cold. It may be that the family has had a run of bad luck. Or it may be that his parents are just shiftless. The child needs shoes. The tribe is poor, too. There's no money except in a government program, which is supposed to be used to "develop management." If you spend the money on a pair of shoes, you are certainly acting responsibly, but you lose your accountability. Hard choices.

As tribes move to take over the control and development of their own resources, establishing both fiscal accountability and fiscal responsibility become increasingly important. Government and foundations are becoming much more adamant about accounting systems. Congressional appropriations committees are demanding assurances from funding agencies of both fiscal accountability and responsibility. There is some room to criticize government agencies in this regard. There was tendency in "Great Society" programs in general and Indian programs in particular to ignore fiscal accountability requirements in the early days because of a lack of experience on the part of the grantees. This was justifiable. However, no real efforts were made on the part of the agency or on the part of the grantee to develop accounting systems as they developed their programs. Both are at fault.

At any rate, neither the "poor" nor Indians are in vogue any longer. Programs and appropriations will be cut off for the slightest excuse. This must be recognized and dealt with.

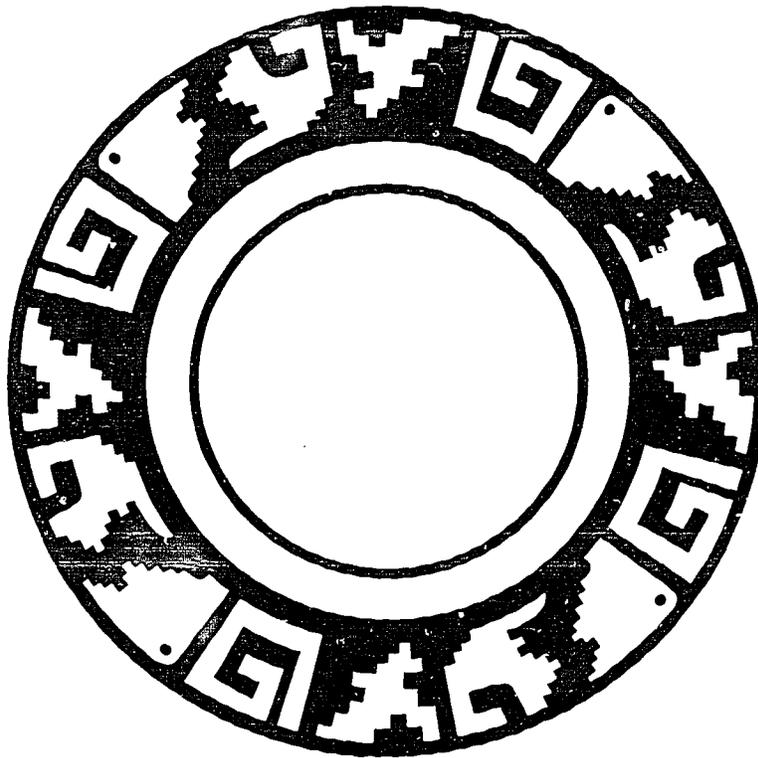
Another angle of this problem must be considered. As tribes begin to look for financing for resource development, they will be dealing with large multinational corporations and financial institutions with the most sophisticated accounting systems in the world. Tribes must not only be able to demonstrate their own competence, they must develop the knowledge and ability to judge the accuracy of the accounting data of their would-be partners or investors.

## Perceptual Barriers

There is an attitudinal barrier to Indian control of Indian resource development on the part of non-Indian investors. The larger society is accustomed to thinking of Indian reservations as welfare communities with their needs supplied by the Federal government. The American business community is not much more enlightened. The Federal government has contributed to rather than dispelled this misconception. It has poured millions of dollars into programs to subsidize non-Indian businesses on Indian reservations. Industrial parks, wage subsidies, lessor favoring leases, etc., would tend to make the business community look on Indian tribes as somewhat less than business entities. Imagine their consternation as they are suddenly brought face to face with the idea of tribes as private owners of vast stores of raw materials which they need for their businesses. And, at the same time, they must deal with the fact that tribes are not only the owners with ownership rights, they are the governmental entity with taxing and regulatory power. With the added layer of federal trust responsibility, with its inadequate, incompetent and antiquated procedures with which they must deal, it is small wonder that the business community is undergoing culture shock.

This perceptual barrier is being rapidly overcome as tribes assert themselves as sovereign developing nations and the business world sees them in this new light. Further, as the business community comes to understand that tribes will refuse to be sold out by their trust officer, the business community will become highly innovative in finding ways to work with tribes. There is a real and immediate danger that they will try first to align themselves with the Federal government rather than with the tribes. For this reason, it is imperative that the tribes move quickly to develop their own sophistication and form their own alliances to withstand the pressures.

While instability of tribal governments and the threat of dissident groups taking action against them is often offered by developers as an excuse for not investing in tribal enterprises, it is laughable compared to the uncertainties they face in foreign developing nations with whom they are making more favorable agreements.



#### CHAPTER 4 TRIBAL SOVEREIGNTY VS. ECONOMIC DEVELOPMENT

*"Today, Indian tribes are at a new point of opportunity. I think there's going to be a tremendous change in Indian country in the next generation and by the time the grandchildren are running tribal governments, we will be in the 21st Century. I can envision Indian tribes which are not only economically self-sufficient but also independently and culturally Indian. I don't see economic development as an Anglo-Saxon prerogative. I think that the Anglos in this country who say, "But, the Indians can't live in teepees forever, can they?" have an all but childish perspective on cultural development. To turn it around: When Europe was in the Dark Ages, ready to explode culturally into the Renaissance, Marco Polo wandered into China and found a culture far more advanced than his own. But it wasn't necessary for the Europeans to assimilate into Chinese culture in order to develop. It was possible for them to grow and develop as Europeans, not as Chinese; and in the same sense it's possible to grow and develop as Indians, not as Europeans. I know there are problems in trying to find an Indian way to develop economically without becoming white, but I say it's possible."*

*Leigh Price  
Attorney at Law*

#### **What is tribal sovereignty?**

Sovereignty is a legal concept of western European international law which defines the existence of a nation-state. Whatever political definitions the various Indian tribes had applied to themselves before the European colonization, the relationship established between the Indian tribes and the European powers — one characterized by treaties — was based on the concept of sovereignty!

There are three fundamental principles, according to Felix Cohen, in the American Jurisprudential view of tribal powers of jurisdiction:

**"The whole course of judicial decision on the nature of Indian tribal powers is marked by adherence to three fundamental principles: (1) An Indian tribe possesses, in the first instance, all the powers of any sovereign state. (2) Conquest renders the tribe subject to the legislative power of the United States and in substance ter-**

minates the external powers of sovereignty of the tribe, e.g., its powers to enter into treaties with foreign nations, but does not by itself affect the internal sovereignty of the tribe, i.e., its powers of local self-government. (3) These powers are subject to qualification by treaties and by express legislation of Congress, but, save as thus expressly qualified, full powers of internal sovereignty are vested in the Indian tribes and in their duly constituted organs of government.”<sup>1</sup>

Jurisdiction, in its simplest terms, is the legitimate power of sovereignty over people and property.

The American Indian Policy Review Commission’s Task Force #1’s Report in its recommendation on General Indian Policy Principles and Objectives makes the following recommendations which restate the relationship of the concept of tribal sovereignty trust responsibility, jurisdiction and the necessity for economic viability.

“Task Force One recommends that the United States recognize the following principles, objectives, and understandings, as the foundation, and as imperatives, of the modern and future National Indian Policy:

(1) Indian people possess an inalienable right to maintain an independent societal, and distinct tribal community, existence within the American system.

(2) The rights of Indian tribes and Alaskan Natives to a secure political existence as self-governing communities of a distinct policy and societal character shall be guaranteed the promise of permanence, and shall not be denied, in the life of the United States of America.

(3) The dependency and trustee relationship between the United States and Indian tribes is not one of governance and plenary control over Indian existence, but was to be and yet should be, one of protection against injuries and losses to the Indian people, and one of material and economic assistance to the tribes as a matter of mutual advantage and advancement.

(4) From its formative stages, and until relatively recent date, relationships between the United States, including its European and colonial predecessors, and the several Indian tribes were founded upon a mutuality of rights and a mutuality of interests, common to all mankind and to all the world’s nations. Treaties were a measure of those rights and of Indian sovereignty, but also treaties were the contract form by which Indian rights might be altered; some were to be diminished, while the remainder were to be protected by the superior power which came to the United States. The contracting, by treaty and agreements, relied upon the willing, or otherwise ultimate consent, of the separate national parties. Indian treaties should not now be changed except through negotiations with the tribal people contracted by the particular treaty and with their consent. As well, the principles that are seen employed in international conventions — and in the labor unions’ bargaining in this country — should prevail; namely, seeking a new contract primarily to secure better terms, or to satisfy broader interests of mutual benefit.

(5) National policy should foster commitments designed to restore the Indian tribes to a level of viable economic independence in context with the modern national and complex world economy. ‘Complete economic independence’ for the Indian tribes, together with the goal of revitalized and creative self-government and ‘self-determination,’ was the declared national policy in the depths of The Great Depression; the Nation can better afford its requisite commitments now.”<sup>2</sup>

Court cases will be brought from now to doomsday interpreting the laws of the United States as applied to Indian rights. Most conflicts have not been decided by any court and very few issues have been decided by the Supreme Court. Even after decisions are made, the Congress may pass new laws which modify or make them meaningless, or the Court’s order may not be enforced. It is difficult to separate a right from an enforceable right.

One prime example of how legislation has affected tribal exercise of sovereignty and the exercise of

jurisdiction in control and development of resources is the case of the Osage tribe related by Charles Lohah at the Great Lakes Seminar:

"I'm from the Osage tribe in Oklahoma," said Lohah, "our so-called tribal government was established and is presently maintained by Federal statute. Congress said, here's your tribal government! At the time (1906) we had large and undeveloped areas of coal and oil. The statute was totally intended for our exploitation — I won't dignify it by calling it development.

Times changed. We have a per capita distribution system which made everybody happy during the oil boom of the twenties. No one worried about our tribal government system until it became unworkable as a tribal government.

We've tried to alter the structure. Very simply, what we tried to do was split the business functions from the tribal governmental functions and make what is now the 'Minerals Exploitation Council' into a subsidiary of a *tribal* council. It seemed very rational to us, but since it was established by a Congressional enactment, it had to go to Congress to get approval. It writhed around in the committee rooms and died like a dog on the floor. So we still have a 'tribal' government restricted to functioning like a wholly owned subsidiary of a multinational oil company."

Jurisdiction is perhaps the most crucial issue facing Indian nations today — who has the jurisdiction — the power over what, over whom, and where.

There is a myth that economic development is not "Indian" and, therefore, neither Indians nor Indian tribes will be good business people. It is just that, a myth. It is a misunderstanding about what economic development is. Economic development is the production of wealth for owners. Indians had economic systems and trade systems before the advent of the white man and the subsequent disruption of those systems. Tribes were economically self-sufficient. They were able to secure food, clothing, housing — the necessities of life — and the "finer things of life" — art, music, literature and religion. They created the wealth they needed and planned for the future. The thing that sets Indian people apart is their method of distributing their wealth — their wealth-sharing systems.

Developing your natural and other resources in order to create wealth to provide both the necessities of life and the opportunity to enjoy the finer things of life to your tribal members is, no doubt, a goal of every tribal decision-maker. Tribes assuming the control and development of their own lives and destinies shatters the myths and stereotypes the Federal government, society as a whole, and some Indians have come to hold as truths. Tribes have come to be seen as welfare states where Indians sit around on their assets waiting for a benevolent "great white father" to pass out the goodies. Never mind that the goodies most often don't come at all or if they do they are of doubtful value, maybe smallpox laden blankets. Never mind that the government services which should be provided were bought and paid for with a large sum of Indian lives and vast areas of lands and natural resources and put into trust for Indian people to perpetuity — a living legacy to be passed from generation to generation. Never mind that the tribal decision-makers bargained desperately against insurmountable odds and in their wisdom, were able to take agreements so sophisticated in their simplicity that tribes today retain their sovereignty as nations in the midst of a nation. True, some tribes never made treaties. They were simply over-run and brought to the brink of extinction. Nevertheless, there is a valid argument that they never gave up their sovereignty because there was never a conscious act of saying "Okay, you guys, here it is. I give you my rights as a sovereign nation." In those days, it was simply a matter of being in the wrong place at the right time. Many of those Indian people are struggling to re-establish themselves as nations. Great controversy rages both within and without the Indian community as to whether those people should be accorded "federal recognition" and receive services. It is a hard question. One attitude that might be considered is "There but for the grace of geographical location go I."

One of the most disturbing pieces of legislation passed during the termination era of the Eisenhower administration was the Indian Law Enforcement Improvement Act (P.L. 280), which was designed to give states jurisdiction over local tribal governments and thus assimilate Indians totally into the non-Indian governmental structure. (Legislation has been introduced in the Congress which would reverse some of the effects of P.L. 280. Recent court cases have also narrowed its effects.) Some states have been hesitant to assume jurisdiction over reservations because of the expense involved for police salaries, welfare, etc., which would not be supported by taxes from the reservations. Some states have now decided that there is a lot of money to be made through taxation on Indian reservations. Since 1968, however, states have been unable to assume jurisdiction over tribes without the agreement of the tribe. Some states, (Montana and New Mexico, for instance) have worked out what they hope will be a loophole. They are arguing that jurisdiction amounts to the right of *self-government* — i.e., that Indian tribes have jurisdiction over Indians (self-government) but not over non-Indians on the reservations. “They figure that the non-Indians have the cash and if they can tax Peabody Coal or Westmoreland, they’ve got most of the money anyway,” according to Leigh Price. “There are two problems with this. One is that they are trying to create a theory of jurisdiction based on race. Traditionally, the sovereign has jurisdiction of power; it has the power over everyone within the boundaries of the jurisdiction. For instance, if you are a citizen of Wisconsin and you drive into Michigan, you have to obey the traffic laws of Michigan. Michigan has power over the driving of anybody in the state, not just the citizens of Michigan. But states such as New Mexico are arguing that the tribes have authority only over tribal members, not over everybody on the reservation. They’re hoping that the Supreme Court will give its blessing to a new form of racially-based sovereignty — and they *may* win.”

Next to this question is the question of civil and criminal jurisdiction over non-Indians within the reservation. Can the tribal police arrest a non-Indian for speeding on the reservation, try him in tribal court and throw him in tribal jail?

Court cases can be won. Laws can be passed, or as in the case of P.L. 280, repealed. Tribal constitutions and codes can be perfected. There could be a referendum where the entire world voted “Yes, tribal governments are sovereign. They have unquestioned jurisdiction over their people and their resources and anybody who enters their reservation limits.” But unless a tribe behaves like a sovereign nation and exercises its jurisdiction, what good will it do? Like a miser who hoards his money and starves to death, there’s no point having it if you don’t use it. But also like a miser, if you run out and blow everything you’ve got, you will just as surely starve.

Tribal sovereignty and the exercise of its powers goes hand in hand with economic development, with the creation of wealth for owners. You cannot have one without the other.

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<sup>1</sup>Cohen, F. *Handbook of Federal Indian Law*, (University of New Mexico, Ed), at 123, (1942).

<sup>2</sup>Task Force #1 Report, American Indian Policy Review Commission, July 1976.



## CHAPTER 5

### CHOOSING YOUR ADVISERS: WHO CAN YOU TRUST?

One of the major decisions that tribal decision-makers must make is that of choosing their advisers. The general incompetence of Bureau of Indian Affairs and other government agency personnel in the field of resource development is admitted by everybody from the Commissioner himself to the Comptroller General to the Federal Trade Commission. While it is fashionable to kick the Bureau of Indian Affairs around, it is neither particularly satisfying nor is it productive. Further, it causes us to overlook many individuals in those agencies who are both competent and sensitive to the complexities of problems with which tribes must deal. They have an added value because they know how the bureaucracy works and why things happen or don't happen. If they are smart, they learn to share information with people they can trust in the Indian community. A tribal decision-maker quickly learns that information is the most valuable commodity. If you know what's happening nationally in the Congress and in the various government agencies, if you know what's happening in your area and agency offices, then you have a much better chance of making proper tactical decisions. That doesn't mean that you should be governed by the trends; merely that you know where the lines are drawn.

It is important to establish relationships with people you can trust. Those relationships should be built slowly and carefully, and with an understanding of the mutual benefits that can be derived. While it is important to know decision-makers, never underestimate the value of the people who actually do the work — the secretaries, the clerks, the support staff for the decision-makers. For instance, there ain't no way the decision-maker will ever return your calls if the secretary doesn't pass them on. Those of us with good secretaries quickly come to value their opinions and advice as well as to rely on them for the mechanical operation of the office — for making us look good.

Another source of advice and expertise that is often overlooked is that available in other tribes. The Quinaults, for instance, have devised a whole new technology for fish hatchery development. They have been very generous in providing assistance and advice to other tribes. The Lummi have the most successful

aquaculture program in the country, including industrial fish farm operations. The Colorado River Indian Tribes and Ak Chin have highly successful tribal farms. Some of the best received parts of our training sessions during the past years were those in which individual tribes shared their experiences and expertise. If your tribe has a particularly successful project or special expertise in a certain area of natural resource development, perhaps you could share that with another tribe. In return, they may be doing something very well that you need help with.

There are both profit making and non-profit making Indian organizations who have expertise in various areas of management, business development, tribal code development, etc. The Administration of Native American Programs, the Economic Development Administration, the Office of Minority Business Enterprises and various foundations have funded organizations to provide certain kinds of technical assistance. This document, for instance, is based on a series of regional training seminars for tribal decision-makers partially funded by the Economic Development Administration.

The business community is another source of expertise. Establishing contact and finding someone you feel comfortable working with is a problem, but it can be done. The Equitable Life Assurance Society of the United States, the First National City Bank, Merrill Lynch Pierce Fenner and Smith, Inc., have all furnished consultants for our seminars, for instance. There are various reasons why the industrial community is interested in providing assistance to Indian tribes. The community as a whole is under pressure to provide assistance to minorities to improve their corporate image. It is good public relations. It may be in their financial best interest as well. They may want to make a deal with you. Or there may be a person in their hierarchy somewhere who is Indian or who has a strong personal interest in the Indian community for one reason or another. Just a good person. In some cases, you can learn a great deal just from studying the way a successful enterprise in your area works. Wayne Sprawls, for instance, who assisted Ak Chin and Colorado River Indian Tribes in starting their tribal farms, learned to be a highly successful farmer himself by picking out the most successful farmer in the area and copying his methods. He leased Indian land and farmed it himself. He became acquainted with members of the tribe who asked his advice about maximizing their agricultural lands — how would he do it if he were the tribe. He advised them to quit leasing it and farm it themselves. (You won't find many Wayne Sprawls —). When the tribe had trouble getting started with financing and Bureau of Indian Affairs regulations, Wayne took it as a personal challenge, used his personal reputation as a selling point and helped the tribe secure financing. As soon as the project proved itself and they were able to find a business manager, Wayne got out. A rare case, yes, but proof that it happens. Wayne made money and the tribe made money. Wayne didn't need the money; he was making money anyway. He incurred the wrath of his neighbors who lost their leases. Why? He is a good man with a basic sense of justice. And he had Indian friends. When you seek help from the business community, know where they are coming from and assess their advice accordingly. Remember, the final decisions are yours.

In the past, legal advice was the kind of advice most often sought from outside expertise. Most people view lawyers and "the law" with a kind of awe that inhibits the kind of questioning necessary to explore a legal question or the qualifications of a lawyer thoroughly. It must be remembered that there is very little "Indian law"; that is, interpretation of the laws of the United States applied to Indian rights. Most issues have not been decided by any court, and only very few issues have been decided by the Supreme Court. Even after decisions are made, the Congress may pass new laws which modify or make them meaningless, or the Court's order may not be enforced. There are few lawyers trained in "Indian law" and even fewer Indian lawyers. While the number of Indian lawyers has increased dramatically during the last five years largely due to the efforts of the American Indian Law Center at the University of New Mexico, there are still not nearly enough, and for the most part, they are young and inexperienced.

There is a tendency among Indian tribes who can afford it to choose large, prestigious law firms who build their reputation in the Indian community by handling claims cases. There is some value in making that kind of choice, but there may be some drawbacks.

Claims cases, in nobody's mind, have ever been considered pure legal cases because of the political

ramifications involved. Thus a claims lawyer had to not only be well versed in claims law but had to be politically knowledgeable and able to assist in lobbying the settlement through the Congress. They had, of course, the added incentive of a percentage of whatever they finally won, usually, plus expenses. There was a certain amount of risk involved. There were usually large up-front expenses involved that only a wealthy law firm could afford to incur. If the tribe had no money, then the lawyer had to assume the risk that if he lost the case, he would have to wait out the cumbersome process of BIA payment and be subject to its limitations. That risk was usually balanced by the fact that those attorneys only took the cases they were pretty sure of winning. Many of these same firms provide *pro bono* (that is, “for the public good”) services to Indian tribes. This may happen because they are extraordinarily good folks with a soft spot in their heart for Indian people. Or it may be because they can get some good experience for a young attorney who will be assigned to the case without risking offending one of their paying clients; or they will build up “good will” for potentially more lucrative relationships. Usually, it is a combination of all of the above. They are basically good people who understand long range benefits.

The value of these large and prestigious law firms should be recognized. However, it should be remembered that expertise in one field does not necessarily mean expertise in another. If you want a divorce, you don't go to a corporation attorney.

There are public service Indian law firms such as the Native American Rights Fund and California Indian Legal Services Program, who provide legal services to Indian tribes without fee. The American Indian Law Center. The American Indian Lawyer Training Program, the National Indian Youth Council and various other Indian organizations provide services to Indian tribes and individuals as well. Those organizations suffer from a lack of funding and from limitations placed on them in restricted grants and contracts as do most non-profit organizations. Heavy case loads require that they make choices about the kinds of cases they handle. Non-profit Indian organizations, legal or otherwise, are subject to the same temptations that tribes are — that is, to seek and accept funding that does not necessarily fit into the best long range purposes of their organization or the best interests of their constituencies, in order to keep the wolves away from the door.

Perhaps the most satisfactory way to secure legal services is for each tribe to have its own full time attorney who answers only to that tribe. Unfortunately, this is not an option for most tribes. Even if it were, the tribe would have to understand that attorney's limitations and to seek specialized expertise when necessary.

As tribes move into the development of their own resources, they face a whole new set of problems in finding the expertise they need. One of the problems is recognizing what you need and then locating it. Many of the fields of expertise are totally outside the expertise of the Indian community and almost everybody else. For instance, as Colorado River Tribes expanded their tribal farms, they found that the technology related to pest control and the associated federal regulations was so complicated that they needed the full time services of an entomologist just to identify the kinds of bugs that were attacking their crops, choose the proper chemicals, and supervise their application. That may sound funny, but when you think of the ramifications of choosing to let your crops die or using the many potentially lethal chemicals in a way which might be hazardous to your tribal members through pollution of your air and water, it makes ultimate good sense. Similarly, when you begin to negotiate your minerals, it doesn't make much sense to go into those negotiations without the benefit of the advice of experienced negotiators.

There are a few basic rules to remember when you choose your advisers.

1. *If you are paying, they work for you, whether they are lawyers, negotiators, management specialists, or whatever.* They are being paid to provide you with advice and not to make your decisions for you. If they are being supplied by a firm or organization with government or other funding for the purpose of providing you with technical assistance, they still work for you and serve at your pleasure.

2. *If you are paying, you should know in advance what it will cost.* Professional people have prices for their

services and should not be hesitant about telling you what they are and *putting it in writing*. Beware of attorneys or negotiators who work on a percentage basis or who want a “piece of the action.”

3. *Know your adviser's background. Check it out. Do not be shy about asking questions or checking references.* You have a right to know. Make your own judgments. The best advisers are those who recognize their own limitations. For instance, a highly competent claims or civil rights attorney may not know beans about negotiating a joint venture development agreement. But he might know someone he could recommend. If he wants to *learn* to negotiate, there would be nothing wrong with letting him work with the pro *at his own expense, not yours*.

4. *If you have any doubts about the advice you've received, check with another source.* Yes, it's expensive, but if you are making million dollar decisions, it's cheaper in the long run. You don't often get second chances on decisions of that magnitude.

The best long range plan is to develop your own tribal expertise. Start identifying the kinds of expertise you are going to need five, ten and fifteen years down the road. If your reservation has timber, for instance, you know that if you manage it yourself you are going to need foresters, marketing specialists, engineers to build the necessary roads, etc. Then start looking at your young people and encourage them to get the kinds of training they are going to need to handle those jobs. If you have a scholarship program, there is nothing wrong with saying what skills they go for and establishing a repayment system in service to the tribe. When you do your planning, don't forget that your tribe is going to need new tribal council members, someone to replace you.

You pay for what you get. Be sure you get what you pay for.



## CHAPTER 6 DEALING WITH DEVELOPERS

*"A great many American Indian tribes own extremely valuable natural resources — water, timber, and minerals. The trouble is that government policy has encouraged the use and development of these resources by non-Indians, and has simultaneously encouraged tribal members to move to the cities for outside employment. The result is that our reservations have the highest unemployment and the lowest family income of any ethnic group of Americans.*

*Native Americans can realize more from their resources than just a lease payment. They can also choose development alternatives which avoid the presently threatened destruction of their culture and environment. The challenge before us is to discuss and decide how Indian tribes can conserve and develop their own resources at their pace and in a manner which is economically, culturally, and environmentally sound."*

LaDonna Harris, President  
Americans for Indian Opportunity

Dealing with developers is the most complex and perhaps the most frightening part of Indian control of Indian resource development. The energy shortage and impending world-wide shortages of other minerals, of food, timber and water, have brought us all to the realization that tribes are the largest private owners of all those resources in the United States, and perhaps, in the world. In the case of non-replenishable mineral resources the decisions you make now may be the last ones ever made by your tribe. If you choose to develop, when your coal is gone, it's gone. When your copper is gone, it's gone. And the pressure is on to develop. Now. If you choose not to develop, there may not be a market for your resource a few years down the road as alternative sources of energy are developed. Hard choices.

Tribes have had very little experience in negotiating their own contracts for development of their resources, particularly minerals. In the past, when a tribe expressed interest in development of a particular resource, usually after a developer had first expressed interest, the Bureau of Indian Affairs as trustee took over "negotiations" issuing a standard lease form for competitive bid. Once the tribe gave the Bureau approval to issue the bid, they

had little further say in the matter. There were no mineral inventories. Large parcels of land were leased for exploration with very lenient time limit provisions for exploration and development which encouraged speculation.

In order to draw on the experience of developing foreign nations, AIO contacted Charles Lipton, an international attorney-negotiator who has advised approximately twenty foreign nations regarding resource development. We asked him to assess tribal contracts made in the past and to offer suggestions for alternatives in the future.

Lipton said, "I have advised many developing countries on natural resource agreements. The Indian leases in this country are among the worst that I have seen; they can only be compared to the old colonial agreements of thirty and more years ago."

"The tribes have been pretty well taken," he said. "One Tribe, for example, entered into a coal lease where all they get is a fixed royalty of 17-½¢ per ton, without any relationship to what kind of coal it is — how high grade, or how low the sulphur content — and more importantly, without any relationship to the value of coal. When coal prices go up, the Tribe won't get anything more; the lessee gets it all. And we all know what has happened to the value, the purchasing power, of the dollar in the last few years." Lipton pointed out that 17-½¢ will buy only half an ice cream cone today. "What will it buy in five years time?" he asked.

"And the story is even worse than that and not far back in history either. In May of 1971, the Tribe entered into a lease agreement after advertising and presumably competitive bidding, with a Billings lawyer — a speculator. Just six months later, he assigned the lease to Chevron. For that assignment, he received \$1,380,749.50. The Tribe did not receive one penny. In addition, that Billings lawyer and his descendents will receive a 9¢ per ton royalty, more than half the royalty the Tribe gets for each ton of coal mined."

Lipton cautioned the tribes to be wary of their advisers. He said that he had a phone call from a Tribal Chairman in South Dakota who had heard him speak once before. The Chairman just wanted a reaction to a proposition. A fast dollar artist was going to help the Tribe lease their land to petroleum companies — and he was going to be damned reasonable about it; he wasn't even going to charge them for his time. All he wanted was 2% of the royalty. That is to say, if the royalty was 12-½%, he would get 2% and the tribe would get the remaining 10-½%.

"I told him that it was just about the worst thing the Tribe could do. After all, that character wanted 1/5 of what the Tribe would get. It could be many millions of dollars," Lipton said. "There are many lawyers and advisers around — some of whom are experienced and quite prepared to give their time and advice for a fee on a time basis. Don't give up any interest in anything to anybody," he said. "That's been the trouble, the Indians get a few cents and the big companies, the speculators and the rip-off artists get all of the profits."

"Deciding what the Tribe wants to do and resolving to do it is the most important step in controlling resource development. You may be told that the law or the regulations won't allow this or that. The object of the exercise is to decide what you want and figure out a way to do it. There are not only more ways than one to skin a cat — there's more than one cat to skin," Lipton said.

The approach should be positive, not negative. For instance, if the Bureau of Indian Affairs regulations require that a Tribe advertise for competitive bids on a lease form or ask for an exemption, it need not be the Federal lease form. You should be able to draw up your own lease form, provided that it meets the minimum requirements of the Federal Regulation. Those are supposed to be minimum provisions to protect the Tribes, not maximum provisions to exploit them. In any event, Lipton maintained that a lease is not the most advantageous form of agreement for a Tribe to use.

## The Federal Lease Form

Lipton pointed out that the Federal lease form is a lessee's deal — that is on balance the clauses favor the developers, rather than the owner. The Federal lease form has routinely been used for public lands and for Indian land under Federal trusteeship. "We must recognize," said Lipton, "that what is good for the Federal government on federally owned lands is not necessarily good for the Tribes on Indian owned lands."

Lipton went into the reasons for this. The Federal government is going to get its financial return not only from the lease itself but also from taxing the profits made by companies using the raw materials from the Federal lands. The Federal government also has some interest in subsidizing the needs of the country as a whole — energy, for instance. Leasing coal owned by the public for 17-½¢ per ton can also be rationalized on the basis that cheap energy is badly needed, that the companies developing coal deposits will pay taxes on their profits to the Federal government, and that jobs will be created and employees will pay taxes to the Federal government. Leasing Tribal coal cannot be rationalized that way. There can be no justification for some of the poorest people in the country subsidizing the needs of the rest of the country, much less the wealthy multinational corporations. Nor can the failure of the Tribes to get a fair share of the profits from their natural resources be justified.

Worst of all, under the Federal lease form, the Tribes have no control over the development of their resources.

"Control means who makes the basic decisions regarding a project," Lipton said — It is very important that before negotiations are undertaken, the basic decisions are identified and a determination is made as to who will make them. For instance, timber owners may determine what the annual cut will be, the reforestation cycle, the species of wood to be grown, etc. Mineral owners may determine how much mining there will be and where; at what rate; what factories are going to be built, if any; where they are to be located; how and when the land will be restored, etc. They may decide to what extent the raw materials will be processed before it passes from their control. Timber may be cut; a sawmill may be established; a chipping plant; pulp and paper mill; a plywood plant; veneer plant; furniture factory. The more you upgrade, the more you add to the value, the more you add to the deal in terms of money, jobs and the "Multiplier Effect" — the creation of new local services, small business and feeder enterprises.

Owners may set conservation standards, environmental standards, training programs and employment and promotion quotas. Developing countries no longer settle for "employment preference" clauses. They set out schedules, for instance, that after five years 90% of the employees in each job category will be local people; in ten years 100% except for certain specified jobs. They don't accept a clause that provides for employment of local people only "if qualified people are available." The developer must qualify them. There may be a requirement that for every ten outsiders, one local person will be sent to school; or for every ten outsiders, one local person will be put in a training program. Owners may decide where housing projects will be built and how they will be built. "Many don't go this far yet," Lipton said, "but they will. That is what control is about."

*"Many of the same American corporations who are dealing with Indian Tribes are giving better terms to the governments of foreign countries where they are further away from markets, where transportation costs are greater and above all, where their risks are greater,"* Lipton said. Tribes must come to the negotiation table knowing this and insist on better deals.

What are the forms of agreement that have been used by developing countries?<sup>1</sup>

*Concession agreements:* Concession agreements are one of the early forms of agreement. A concession agreement gave title, ownership of the resource, to the foreign investor and allowed the foreign investor to come in with his own law or froze the local law so that it couldn't be changed. These concessions were

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<sup>1</sup>In speaking of developing countries, the words "government" and "owners" are used interchangeably. All mineral rights are owned by the government in developing countries.

justified on the basis that it was the investors of the mother country, the colonial administrative country, whose interests were to be protected, not the local people. The owners had no control over the development of their resources at all.

*Lease agreements:* Lease agreements were used before World War II. They usually provided for a fixed number of cents per ton for minerals or per acre of timber cleared. As the value of the raw material went up, the increased profits went to the lessees, and the owners got nothing more. As the value of the currency went down, or depreciated, the owners got less and less for giving up more and more. The local people remained the owners, but they had no control over the development of their resources, until later, with political independence, when they enacted their own legislation. The lease term was usually ninety-nine years, but really longer as the term ran until the mineral deposit was mined out. The lease form usually did not include meaningful provisions for the employment of local people, or for the development of local business — the Multiplier Effect. The Indian coal and petroleum leases of today are very much like those old lease agreements. Leasing is not development.

What are the forms of agreement that are *now being used* by developing countries?

1. *Joint ventures:* Joint ventures are agreements where the parties form a kind of partnership and agree on a sharing of the risks and the profits, and agree on how the basic decisions are going to be made. Lipton stressed that most developing countries now insist on structuring their resource agreements so that their financial return, sometimes called “the government take,” comes in three ways:

(a) they collect a royalty which is not fixed in cents per ton or trees cut; the royalty is a fixed percentage of the market value. This guarantees a cash flow, whether projects prove to be profitable or not, and insures that the payment is in proportion to the value and will increase if inflation raises the value of the resource.

(b) they collect their own profits tax; and their auditors make that calculation.

(c) they obtain a participation in the net profits.

Lipton explained why developing country officials like joint ventures. “They say, we want to eat out of the same pot the foreigners do. That’s why we want a joint venture and want to share in the net profits. We know they’ve got good engineers; we know they’ve got good accountants; we know they’ve got many different ways of moving money around. The raw material is ours, and that’s our contribution to the joint venture. The developers who are contributing capital know how to use their marketing ability. But the basic value is ours; we want to have a share of the profits from it.”

Joint venture agreements are complex and you have to know what you are getting into. Lipton said, “if you think you have been skinned before, when you go into joint ventures, the opportunities of getting skinned again are increased immeasurably if you don’t watch what your partners are doing.” Once a joint venture is entered into, as in any other partnership, you must be sure that partners act and continue to act properly. What is won at the negotiating table can be lost later on if you don’t watch out for your own interests.

2. *Production sharing agreements:* The production sharing agreement is a variation of the joint venture. The owner’s take is in-kind rather than in a percentage of profits, like a share cropping arrangement. The owners can then market their share themselves. This works well for certain resources like petroleum, timber, or gold; it is often to the advantage of the owners because you can’t be sure that developers are selling to the best advantage. They may be selling at reduced rates to their own subsidiaries or to others who will reciprocate. This could make the profits lower and the owner’s share lower.

3. *Service contracts:* The newest form of agreement is a service contract under which the owner hires a company to develop the raw materials for a fee. This is similar to employing a contractor to build a road or a building. The fee could be a percentage of the value of what's produced, a percentage of the profits, or a fixed amount of dollars. While the owner has complete control, the owner also bears the total risk, but gets all of the profits.

The Venezuelan government, for instance, hired an American mining company to mine an iron ore deposit, deliver the ore to a port and load it on a ship. They paid so many cents a ton for it. The Venezuelan government has hired a second company to market the iron ore for them, and they are paid a marketing fee.

The government of Iran has hired an American mining company, Anaconda, to mine a copper deposit for them for a fixed fee. Both are very large projects and in both cases, the owners — the governments of Venezuela and Iran — are bearing the total risk. You cannot expect 100% of the profit if you are not willing to take 100% of the risks — but there are ways of minimizing those risks.

An example of a small scale service contract is the development of a kaolin deposit in Swaziland. (Kaolin is a kind of clay — one kind is used for making dishes; another is used to coat paper with a slick finish. Swaziland is a small country in Southern Africa). The Swazi discovered that one foreigner was mining kaolin under a lease and had simply hired fifty or sixty Swazi to do the work and he was making the money. The Swazi decided not to renew his lease and to run the mining operation themselves. They hired an expert to tell them where to find the best grade of kaolin, hired a mine manager and took over the total operation.

#### **What does an investor look for when he considers a deal?**

1. *Discounted cash flow rate of return:* The calculation of a discounted cash flow rate of return (DCF) can be complicated, but basically it is a method to show how much money an investor will get out of the deal compared to how much money he must put into it over a period of time, based on the present value of a dollar. A dollar today is obviously worth more than a dollar a year from now. An investor will want to determine what he can reasonably expect over the life of a project expressed in terms of today's dollars. If he sees he can only expect a 6% or 8% DCF rate of return on his investment, he'll probably put his money in a savings bank or government bonds — it's easier and safer. He decides on a minimum amount of return he'll settle for or he won't make an investment. To the extent that he can get more than that, a Tribe has not made its best deal. At this point, predictability and stability come into play.
2. *Predictability and stability:* A company which would in all likelihood invest in an operation in the United States with an expected DCF rate of return of 15% would never invest in the same operation with the same return in an unpredictable, unstable country. Indian reservations face the same kind of scrutiny. If a tribe is together and there's relatively little internal dissention, then an investor might settle for a smaller rate of return. On the other hand, if they throw their tribal chairman out every year, an investor will look for a higher rate of return because of the unpredictability. That means tribes will get less — the price of uncertainty must be paid. "There is no free lunch" as Lipton stressed several times.

*How can tribes know if they are making a good deal?* Lipton said, "If you've got as much as you can and given as little as possible, then you've made a good deal. In order to negotiate with an investor, you've got to put yourself in his shoes, and to the extent possible, know what he knows, otherwise you are in a very poor bargaining position."

The feasibility report is a very important tool. It is a report prepared for the investor which sets out a complete plan for the organization of a project, how it is to be done and how it is to be financed. It also includes a projected DCF rate of return. It therefore contains the basic information on which a developer bases his decision to invest. Without it, a Tribe doesn't know what the real situation is. You are negotiating in the dark.

You may not know the value of your coal or your timber, but you can be sure the investor knows. He knows it very well. He's done it many times in many different places. "Compared to you, they are standing in flood-lit rooms and you don't even have a flashlight," Lipton said.

It is very hard to get good feasibility reports. You can insist on seeing the developer's report and you must be sure it's the real one — the one they show their Boards of Directors. You must have some method of verification and a sophisticated Tribe would make sure they got the right advice from experts to check it out.

*What should a tribe look for when it considers a deal?* Basically, the same things an investor does: what will the Tribe get out of it compared to what they put into it? The Tribe must consider both the negatives and the positives:

1. Cash revenues.
2. Jobs.
3. Training people in skills that can be used in other enterprises.
4. Service and feeder enterprises — How can the Multiplier Effect of an enterprise be increased? If it's a timber operation, can we start a plywood plant or a furniture factory? If it's a hotel, for instance, can we start supplying the meat to the hotel? Can we start our own grocery stores, service stations, etc. to keep the new dollars in the community? (According to a report prepared by the Secretarial Commission of the Department of Interior, on the Pine Ridge Reservation the average payroll dollar turns over less than once on the reservation. In a well-rounded, fully developed economy, the "original" dollar of the foundation industries characteristically turn over from five to seven times through local services. In a report prepared by the University of Oklahoma in the late sixties, economists found that on an average, for every seven new out of town students at the University, one new job was created in the service enterprises in the community. It would seem to follow that the creation of new jobs on the reservation should be followed by an increase in employment in service industries.)
5. Alternative uses for the resources — Strip mined land cannot be farmed or ranched.
6. Effect on other resources — A mining enterprise, for instance, will require water. Water is a resource with a price on it, too.
7. Environment — If it is a factory or industrial operation, there may be pollution. Your water and air may be polluted. Strip mining has devastating effects on the land unless properly controlled with tough restoration requirements.
8. The impact on the community — Will the enterprise bring in an influx of outsiders? If so, what about cultural disruption and the costs of outsiders such as schools?

### **Cost/Benefit Analysis**

Cost/benefit analysis is a method of comparing the quantified costs of a project to its economic benefits.

There are costs to a government or an owner which may be indirect but which must be considered and evaluated against future benefits. Such costs include the value of water used in the project, alternative uses for land, the costs of road maintenance and providing schools and facilities for new workers. Then one has to consider the effect of inflation which seems to follow a large scale project unless controlled. Of course, one must take into account factors that are difficult to quantify, such as environmental damage, credit limitations and the impact of a large project on the traditional way of life of the local people. "For example," Lipton said, "in Swaziland, the government will not allow a coal deposit to be explored. It's under a game reserve. They say, 'It's very important to our people that game be here. We don't care how much money is going to come out of the land from a coal mine because a hundred years from now, that will all be gone. A hundred years from now, game is still going to be important to our people. We're going to keep this a game reserve.' When I say — let's find out what's under the land, maybe there's a billion dollars of coal there and we'll just move the game reserve, the government answers: 'No, we don't even want to know. We might be tempted.' That government has made a cost-benefit analysis and to them the cost is more than the benefits."

## Negotiations

So far, there is a tremendous imbalance of information and experience between the developers and the Tribe's side of the negotiating table. There is usually nobody in a Tribe with commercial experience equivalent to that of an executive in a big corporation. On the developer's side of the table, you may have people who have done this fifty times all over the world. On the Tribe's side, they've just never done it before. Developing countries now seek advice from outsiders and they have begun to train their own people. "The first time maybe they don't make such a good deal, but they learn, and the second time, they make a better one and the third time around, they know what to ask for and the experience to know how to get it," Lipton said. But the difficulty with the Tribes is that some just cannot afford to make mistakes, or all their resources could be leased out.

Information is power. Developing nations have begun to exchange information. In many respects that is what the producers associations are about — the Organization of Petroleum Exporting Countries, the International Bauxite Association, the Iron Ore Producers Association.<sup>1</sup>

In many cases, information on the kinds of agreements negotiated by others can be learned through research. Outsiders with expertise may be hired, but they should only be hired — they get paid for their time and their experience but they should never get a piece of the action in the form of royalty payments or percentages of profits.

There are many, widely varied issues that come up in dealing with developers. Each project must be undertaken carefully and considered from every possible angle before, not after, an agreement is made. Expertise must be sought when necessary and used early. But the overriding considerations in every case must be control and a fair return to the Tribe. As Lipton put it, "In the last analyses, nobody really cares whether you get a good deal but you."

Mr. Lipton has allowed us to reproduce his paper on Government Negotiating Techniques and Strategies attached as Appendix I to this chapter.

Stephen Zorn, Assistant Director (Policy and Planning), Office of Minerals and Energy for the government of Papua New Guinea and a negotiator himself, has prepared two papers, *Getting a Fair Deal in Mining Projects* and *A Note on Possible Forms of Taxation*, which he has given us permission to reprint as Appendices II and III to this chapter.

### Appendix I

#### GOVERNMENT NEGOTIATING TECHNIQUES AND STRATEGIES

By Charles Lipton

Negotiation is the process by which an agreement is reached reconciling or compromising conflicting interests put forward as specific proposals. There are a few accepted assumptions: the process is supposed to be non-violent, based on mutual good faith and the intention is to reach an agreement.

It has become fashionable lately to apply games theory to negotiations. In an era of computer technology, there is a tendency to try to reduce almost every human process to numbers which can be programmed for the

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<sup>1</sup>Indian nations have also begun to form producers associations. The Council on Energy Resource Tribes is a coalition of the tribes with producing or identified energy resources such as petroleum, coal, oil shale, and uranium.

computer. There are still, however, some areas of human experience which defy the computer, including among others, the art of negotiation.

The choice of title does imply, however, that this is an adversary type of art form, a series of conflicts and confrontations.

Governments should approach negotiations with a thorough understanding of their own interests and those of the other side. It is necessary to determine the objectives of the negotiation and decide how important each point to be discussed really is to the government. These can be ordered as a set of priorities. There will be areas which will be of such importance that the government cannot compromise and other areas in which there will be considerable room for compromise. The art of negotiation is to obtain one's own objectives to the maximum extent possible and compromise in those areas which are of least importance to your side. This in turn depends upon an appreciation of those objectives which are most important to the other side.

Most governments use a team approach in negotiating mining agreements. It is common to have on the negotiating team, members with relevant financial and technical knowledge. A negotiation will usually affect more than one ministry or department of government and it is therefore not unusual to have representatives from the different departments on the negotiating team. Occasionally governments believe that there is political safety in numbers. However, too many members make for an unwieldy team and in such cases one discovers that the real negotiation takes place between the team leaders when they meet outside the negotiating room. With too large a group, the negotiation becomes a form of staged play in which roles are acted, there is sound and occasionally fury, but the meaningful discussions are held elsewhere.

In organizing a team, it is important to decide who is to speak for the government. Only one person should be responsible for putting forth the government's arguments, posing alternatives and agreeing to compromises. Others may speak in their own area of competence, but only the team leader should be empowered to commit the government.

It is non-productive to have too many people speaking. While members of the negotiating team should act as advisers to the leader, they should not all be authorized to speak. Speaking parts should be carefully limited and assigned to two or three and seldom more than four persons. Usually technical areas may be assigned to the specialists on a negotiating team, but the parts should be assigned in advance in the rehearsal, not at the negotiating table.

It should go without saying, but it seldom does, that only one person at a time should do the talking and that there should never be dissension demonstrated in the ranks of one's own team. Arguments among team members should be reserved for private sessions and never take place in front of the other side.

Selection of the team leader is often of crucial importance. Some governments make the mistake of considering that this is one of the perquisites of a particular government position, be it minister, permanent secretary, director or attorney general. Regardless of title, the leader should be the best negotiator available to the government. This in part is a function of his experience but most importantly his personality. The leader should be a strong personality, able to make decisions and take the responsibility for them to the extent that authority for such decisions has been delegated to him. He must be a man of intelligence, ability and experience and he must be effective. The leader should be articulate, both flexible and tough, practical, perhaps a bit of an actor, quick minded and impersonal, in short professional. While it is always a mistake for a negotiator to attempt to curry favour with the other side, to seek to be popular or liked, it is important that he establish the other side's respect, both for himself as an individual and for the positions that he is advocating.

Senior government officials must understand the importance of supporting their negotiating team. Attempts to undercut a government negotiator by the investor's negotiating team leader seeing the president, the prime

minister or the minister alone should never be permitted. The only position to take in such an event, if the other side's team or leader must be received, is to arrange for the government's team leader to be present as well. Senior officials should refuse criticism of their negotiators and should always take the position that they speak for them and are following their instructions.

Each side in a negotiation will be trying to seize the initiative, to make its proposals the basis of discussions. Here the government has an inherent advantage. As a government, it should control the agenda, determine the procedure, have its negotiator "chair" the meeting. In this way the order of the presentation of points will be that selected by the government and the other side will then be forced to negotiate the government's proposals, not their own. This is particularly important in making compromises and trading off one point for another.

I find that all too frequently government officials are not adequately prepared for negotiations. Fall back positions should be determined in advance, compromise possibilities worked out in advance, arguments and counter arguments should be rehearsed in advance. No argument, position or compromise not previously considered by the negotiating team should ever be expressed for the first time by a government official at the negotiating table. It could be a particularly weak argument, open to an easy rejoinder and could well adversely affect other points. One should be especially careful in putting forth alternatives which have not been thought through and the ramifications carefully considered. It is disconcerting if not surprising, how frequently this happens. A negotiation usually has a number of surprises, but a government official should never surprise the members of his own team. The government team leader should not offer a compromise unless this has been discussed in advance with members of the negotiating team.

In short, a script or scenario should be outlined before the government negotiators reach the table and no departures should be made unless there is discussion beforehand by the members of the negotiating team. As a consequence, this may mean that recesses must be taken so as to allow team members to discuss any new point which had not been previously considered. The team leader should not offer any compromise or concede any point unless this is part of the script or unless he calls a recess in which the compromise is considered and weighed and he is given appropriate advice as to its consequences and its effect on the other points in the negotiating position.

There should be a parity between the leaders of the two negotiating teams. If the investor's representative must report back to his president or board of directors to obtain approval, then it is essential that the government retain the flexibility of having its negotiating team leader report back to the minister to obtain such approval. Therefore, the government team leader should be careful to determine the authority of the chief negotiator on the other side. There may be an advantage in representing that the government team leader has no greater authority. This may avoid the problem of premature commitment and avoid the tactic of finding the government committed only to have another side advise that its board insists on one additional point.

It is good practice for the government's negotiating team to meet in advance of each negotiation session to conduct a post mortem on the last session and to decide on modifications of the overall strategy and any changes in position. I have, however, seldom seen that good practice followed.

In orchestrating a negotiating session it is of value to provide opportunities for the team leaders to meet alone over lunch, dinner or during coffee breaks. It is those times when compromises are frequently reached. The informality and face saving possibilities of such meetings may lead to compromises which are more difficult to reach in the confrontations of the large plenary sessions.

There is sometimes advantage on occasion in asking the other side to speak first. At the end of a negotiating session, it is frequently a good tactic to ask the other side to consider overnight the government's position and determine whether and how they may be prepared to meet it. At the next session, wait for the answer before

volunteering concessions to meet the other side's position. It may be that the other side is prepared to surrender some points without further concessions on the government's part.

One can never over-emphasize the importance of listening carefully. Listening is sometimes more important than talking. One must look for the signals of where areas of compromise lie.

The importance of language is frequently overlooked. It is necessary to realize that the language of the negotiation may be a second or third language of some of the participants. One well-known negotiator has referred to psycho-linguistics — the effect of language on cultural sensitivity and the "psychology" of a negotiator. Some words really do have different meanings in different cultures, even (or especially) in translation.

Incidentally, never assume that because a man is not speaking your language that he does not understand it. Frequently, he may understand a language better than he speaks it.

Using interpreters sometimes has advantages, particularly when one knows both languages — it gives additional time to evaluate arguments and form counter-arguments. And don't forget that the other side may know your language when you hold whispered conversations on your own side of the table.

Negotiating experience is most important: there is simply no substitute for it and it is always difficult to obtain. Recognizing this, some academics have attempted to devise courses on negotiation and even stage mock negotiations patterned after the mock trials and appellate arguments which are used in the training of lawyers. I suppose this academic experience is better than no experience at all. But again, as in other areas of human relations, there is just no substitute for actual experience.

One method of providing a government with experienced negotiators is to assign bright young men to negotiating teams just so they listen, get the feel of negotiation and in that way acquire experience. One must recognize, however, that to be an observer without responsibility for decisions is not quite the same as to be involved in negotiations with that responsibility. In academic negotiating exercises, it is difficult to reproduce in a vacuum the economic, political and personal factors which are at work in a real negotiation and determine its outcome.

Governments usually put their best people on a negotiating team, particularly for an important negotiation. In some of the least developed among the developing countries, where there is a shortage of trained and experienced officials, the same team members move from one negotiation to the next. The cream of the government's personnel is used in the negotiation, and the administrators who then follow up after the agreement has been made are often not of the highest calibre. The result is that what is won at the negotiating table is frequently lost in administration. It will prove to be of great value to include on a negotiating team at least one member who will be responsible for the administration of the agreement after it has been placed in operation.

One must recognize that there is frequently an imbalance of information between governments and major mining companies. The investors invariably have more detailed and accurate cost and revenue information. They are in a better position to make realistic estimates and projections. After all, they have their own experience in other places to use as a yard stick.

At the same time, the investors have a greater understanding of the industry and the market forces which will be at work. They best know how to measure the government's projected revenue and know where to make their compromises and trade offs at the least cost to themselves.

The investors are usually much better informed about the terms of comparable agreements made by other governments. They are constantly presenting themselves as having to compete with investors in other countries

and thus asking for concessions on the basis that they cannot afford to pay more to country "X" than their competitor pays to country "Y" for the same minerals in comparable markets. Governments should exert every effort to obtain information on the terms and conditions of comparable agreements entered into by the investor across the table with other governments.

Of course, I could be accused of prejudice, but I find that there frequently is a role to be played by the outsider adviser. In part, such an adviser redresses the imbalance of experience and information. At the same time, such an outsider can frequently serve as a lightning rod in negotiations. He can be the cutting edge, taking the hard positions. If they are not successful, they can of course be easily disowned by the government. The outside adviser is particularly useful in providing information on similar agreements entered into by the same investor that is on the other side of the negotiating table.

One must be careful in the selection of outside advisers to make sure that there is no conflict of interest in their advice to government and that they really have relevant expertise and experience.

Frequently the outside adviser becomes a form of political insurance, used to forestall an opposition party which may criticize an agreement and even within a government as a screen to avoid criticism by other ministries and departments.

It is most important to obtain as much information about the investor as possible. At the minimum, governments should insist on having annual financial reports containing balance sheets and profit and loss statements. They should check on the credit rating of the potential investor and its performance in other projects in other countries.

Here it is important to recognize that a government may be dealing with only the very thinly capitalized subsidiary of a major mining house whose assets may not be sufficient to meet contingent liabilities. In such an event, it is in the government's interest to ensure that the investor will be in a position to meet its financial obligations under the agreement which is eventually reached, through parental guarantees or through performance bonds.

One technique which is of considerable use in negotiation is to put yourself in the other fellow's shoes. What does the investor actually want; what are his own tax laws; what points are most important to him; what alternative proposals will he find most attractive. The object of such an exercise is to find those areas in which government can offer something which will benefit the investor without necessarily being detrimental to the government. An understanding of the investor's tax laws can frequently produce several such attractive possibilities.

It is very helpful to have minutes of a negotiation. I am not a believer in tape-recording negotiating sessions because I feel that it is an unnecessary process. I prefer that each side take its own notes and that there not be any recording. It would suffice to record only the agreements reached between the two sides. This should be done by the team leader but one team member should be designated to do this. The minutes should then be prepared and circulated to the other side in the form of a draft. The minutes should be carefully reviewed by both sides only.

It is often obvious since the very beginning of a negotiation that one side is the beginner's. The side that prepares the minutes should be in the beginner's language. The only effective way to handle this is to have the minutes drafts be considered side by side by both sides.

There are many specific ones. Obviously it is important to have such an agreement. There is

therefore some virtue in attempting to work out first an agreement on principles which can then be refined in a text setting out in detail the specific agreement of the parties.

I find that faster progress can be made if negotiations deal first with principles rather than with the specific language to be used in the final agreement. The British practice to use "heads of agreement," a statement of the agreed upon principles, is very useful in negotiations. There are of course frequent drafts of the "heads" or the "principles" but the negotiation will move faster if such a document is agreed on before considering the final definitive agreement.

The extent of the detail in an agreement is a function of the practices of individual governments and the nationality of the investor. The American practice is to be extremely detailed, while British and Continental practice is to use general clauses. The objective course is to spell out the agreement that has been reached in sufficient detail so that it is clearly understood and as many potential points of misunderstanding eliminated as possible.

Someone once said that the best drafting committee is a committee of one, and of course we are all familiar with the old adage that a camel is a horse designed by a committee. In my view the optimum number to have on each side of the table in a drafting session is two.

Publicity in the course of negotiations should generally be avoided. Premature publicity almost always works to the disadvantage of the government officials who are conducting the negotiations; it tends to expose them to criticism. Advance publicity forces them into negotiating positions which may not be advantageous to their government. Occasionally it frightens the investor, leads to public criticism, to expectations which can only end in disappointment and is frequently used to embarrass government officials. Progress reports may be useful and the texts of press releases agreed upon by both sides could be issued. Generally speaking, however, it is best to turn the light on only after a final agreement has been reached.

It may be well at this stage to briefly review some of the better known techniques or "gambits" used in negotiations.

There are a number of cultural gambits which depend on so-called national characteristics. There are some that maintain that one should negotiate with Japanese in a different way than with British and similarly, with Germans in a different way than with Americans or Italians. Needless to say, I shall side-step such national gambits for purposes of this paper.

One of the best known gambits is the divide and conquer tactic. This is a tactic increasingly used by governments in negotiating recent mineral development agreements. As the projects get larger and require more capital, the risks become too great for just one or two companies. In addition, various national and international sources of finance must become involved in order to provide large loan capital. For these purposes, a multinational consortium is frequently created with companies of two, three and sometimes four or five countries represented. In dealing with such a consortium, a government should be knowledgeable about the tax laws, investment strategies and marketing requirements of the different members of the consortium. As a result, there are frequently built-in conflicts of interest among the consortium members and it is possible to take advantage of them in negotiations.

Curiously enough, the most frequent gambit that I have encountered in advising governments on mineral development agreements is the "marginal project." I say curiously, because I have never been in a negotiation where the project has been described by the mining company other than as a marginal project. It is fantastic the amount of time, energy and money that will be committed to the negotiation of marginal projects by investors. It is obvious that the investor refers to the project as marginal only in hopes of obtaining added financial inducements from the government. One method of dealing with this gambit is to inquire what the investor believes is a

reasonable return and to ask what the projected return is on the basis of the negotiations to that point. This information is seldom forthcoming, but if it is, a government can offer to increase the incentives to reach the reasonable return level but that any higher profit must either be shared with or go entirely to the government. I have found that this frequently leads to an abandonment of the marginal project gambit.

A variation on the marginal project gambit is the walk-out, or “we have finally reached a breaking point.” This can be very effective, particularly when the government negotiating team is led by a civil servant who is then faced with the unhappy prospect of having to explain to this minister just why this large project might never materialize and how the loss of a large hard currency investment will affect the development plan. One needs good nerves and a strong stomach to combat this particular gambit. Frankly, I never believe in the seriousness of walk-out threats until the door is actually closed behind the other side’s negotiator. There are those, however, who quickly offer increased incentives when the hand is on the doorknob: others wait for the VIP lounge at the airport. I usually advise to let them go. If it is a good enough project, they will be back. In any event, it is always possible to begin talks again. Remember, the other side wants the projects, or they wouldn’t be negotiating for it.

I am not very fond of the “let’s be partners” approach. There are those who feel that a negotiation should not be an adversary proceeding. Mining negotiations, they maintain, are an attempt by both sides in a spirit of reasonableness to work out the rules for an arrangement by which the government and the investor will live together for an agreed upon period in the future. It is, they suggest, a marriage, and one should enter into such a state with understanding, love and affection. My own view is that a mining development agreement is basically a contract for the sale of minerals, with the government as seller and the investor as buyer. I have elaborated on this view elsewhere. Such a negotiation is more of a “horse trade” where the government as seller attempts to get the highest price for its minerals and conversely the investor seeks to obtain them for as little as possible. There is no romance to it.

Investors, and frequently governments, many times present their chief negotiator in the role of “nice guy” in the hope perhaps that the other side will not wish to appear rude. I have been doubtful of the value of this approach. A negotiation is not a popularity contest. The basic economics will out in the end and I suspect that it is only wishful thinking to believe that by playing the nice guy role the other side will be more forthcoming than it would otherwise be.

A variation of the nice guy gambit is the tactic to refer to the senior officials, to whom the government and the investor’s negotiating team report, as being very difficult. The intention is to make the other side believe that it is more advantageous to negotiate with the man across the table than those really impossible people who will come to the negotiating table if agreement isn’t reached with the nice guys presently sitting there.

Another use of this tactic is to ask for the concession of a point just to be able to convince these difficult senior people of the seriousness and reasonableness of the other side. It is amazing how many company chairmen and boards of directors have thus been slandered by their negotiators and, on the government’s side, how many ministers and cabinets have been so maligned by their own officials.

More successful is the “good guy/bad guy” gambit. A lawyer is usually cast as the bad guy and the chief negotiator as the good guy. There are a good many advantages to this particular gambit. A bad guy is aggressive, hard, tenacious and unyielding. The good guy appears to be reasonable, is willing to compromise and is usually the chief negotiator or the administrator who must live with the other side after negotiations are completed. This of course pre-supposes a continuing relationship, as is the case with a mining development agreement, rather than the one-shot contract. The successful use of this gambit depends on a good understanding between the role players through experience or through rehearsal.

Governments frequently meet with success using the “it must be seen to be fair” gambit. The script here calls for the government’s chief negotiator to point out that the real assurance of the stability of the agreement is

whether it is accepted by the general public as a fair agreement. Like Caesar's wife, it is not enough to be virtuous; it has to be seen and appreciated as being virtuous. This of course also carries the complication that there is some possibility of instability, even in the face of all the assurances that the investor has extracted from government. The gambit must, therefore, be used with some sensitivity and restraint.

The "split the difference" gambit is of course one of the oldest known. The standard defense to this particular technique is to always ask for more than you are willing to take and keep one's distance in the bargaining. Do not get committed to a figure in compromise only to have the other side move to split the difference. Flexibility, and the use of the package or tie-in compromise are the best defenses.

In the package or tie-in compromise gambit, two or more points are negotiated together: for example, combining the depreciation schedule with the loss carry forward provision or the limitation on the loan to equity ratio with the percentage of the withholding tax on interest. In part, this is also a method of insuring that nothing is ever conceded without obtaining something in exchange.

The great difficulty with the deliberate delay tactic is that it frequently cuts both ways. It is to the government's advantage, particularly after significant exploration costs have been incurred and a feasibility report obtained and paid for, to put pressure on the investor by stringing out the negotiation while the investor watches the anticipated costs escalate beyond his projections, including inflation factors and contingencies. On the other hand, government may have already planned for the use of the expected revenues from the project so that it is sometimes the investor rather than the government that utilizes this pressure tactic.

Several years back in the United States it was quite popular for one side in a negotiation to make what was termed a "non-negotiable" demand. The popularity of this approach seems to have waned, but tagging certain positions as non-negotiable is still a fair tactic, particularly when the government negotiators are bound by principles enunciated by the head of state or embodied legislation.

The precedent gambit is a favorite among lawyers, and this particular argument has been used by both sides. The investor maintains that if it agrees to a particular government demand, then it will find itself in a position of having to do so in all the other countries in which it has comparable investments. Government, of course, makes the same argument on its side. One then spends considerable time drawing the distinctions. The quintessence of this particular gambit is the most favored company or the most favored government position. Investors have in the past been able to obtain most favored company treatment by arguing that otherwise they would be discriminated against. I find that when the investor asks for most favored company agreement, the most effective reply is to point out that this should be a two-way street. The government must then obtain in exchange most favored country treatment, so as to have the benefit of any better terms that the investor may have offered to any other government. After all, the investor would not want to discriminate against this government, would it? This almost always ends the negotiation on the particular point without either provision being included.

The precedent argument is sometimes met through the use of that pernicious instrument, the side letter. This is a useful device if one side or the other is concerned that the inclusion of a particular provision in a public agreement would cause other investors or other governments to ask for parity treatment. Such a provision can be excluded from the public document and placed in a private one. This is usually in the form of a letter or exchange of letters and hence termed a side letter. Some particularly scrupulous observers have commented a government should not enter into such secret covenants, secretly arrived at.

Negotiators find that the most difficult problem that they face in negotiations is one of timing: deciding at just what point to be reasonable and give in or how long to maintain one's position. There really are no guidelines that can be handed down because in many respects this is the essence of the negotiating process. All I can suggest is that one does not give in too easily, too quickly and certainly not unless it is part of the script agreed upon in advance or after consultation among the members of the negotiating team. As I have indicated before, my rule is to give up nothing unless something is obtained in exchange. Some believe that it is important

to make concessions in order to keep up the tempo of a negotiation or to keep a positive atmosphere. Economic realities and other pressures dictate at what point a negotiator compromises. Here I suspect is the real mystery of the art of negotiation, and the relative experience of the negotiators will have its greatest effect.

The lawyers I know have won and lost cases in the courts but I have yet to meet a lawyer who has lost a negotiation. Needless to say, when a point is conceded, it is considered significant by the side conceding and trivial to the side accepting the concession. But it is well recognized that each side has almost an obligation to attempt to convince the other side that they have in fact got the better of the deal. This is no doubt another tactic to ensure the stability of the agreement once made, though others may say it is just good manners.

In conclusion, perhaps it would be well to list some of the pitfalls that should be avoided:

(1) Never threaten, unless you are prepared to carry out the threat. Don't permit any credibility gaps; once your bluff is called, credibility is difficult to regain.

(2) Don't lose control over the negotiation. The government should negotiate on its own ground, frame the issues and determine the procedures.

(3) Ask for more than you are prepared to accept and don't get committed to an inflexible position. Always leave room for the bargaining process and don't be timid in putting forth knowingly unacceptable proposals.

(4) Never allow a mistake to go uncorrected. Sooner or later it will be discovered and result in mistrust.

(5) Protect your side's interests; let the other side worry about theirs. But an agreement to be stable must be fair and reasonable to both sides.

(6) Never give anything without getting something in return.

Finally, remember that negotiation, like politics, is supposed to be the art of the possible.

## Appendix II

### GETTING A FAIR DEAL IN MINING PROJECTS

By Stephen Zorn

#### I. TIME FOR A FAIR SHARE

In the past ten years, the governments that have sovereignty over mineral and energy resources around the world have greatly increased their returns from the exploitation of these resources. The most obvious example is the action of the OPEC countries in raising the price of oil. But the same pattern exists for other minerals as well. Bauxite producers like Jamaica and Guyana have sharply increased prices and taxes. Copper producing countries like Chile, Peru and Zambia have increased taxes or, more often, taken over direct ownership of mining operations from foreign investors. Even in industrialized countries like Australia and Canada, national and provincial governments have imposed royalties and insisted on higher export prices for their minerals.

There is a common theme that runs through all these efforts to increase the return to the owners of minerals. That theme is that the owners of resources are entitled to a "fair share" of the final value of the resource. There may be arguments about how much is a fair share, but such a share is certainly more than one or two cents out of every dollar of the final sales price of mineral products. Yet, under the mining concession agreements that were in force in many countries around the world until recently, and under the mineral leases that are still in effect for many Indian-owned mineral deposits, one or two cents in each dollar was often the maximum that the true owner of the resource — the government or the tribe — could expect to receive.

The situation is changing, though. Resource owners, whether they are foreign governments or Indian tribes, are now able to find out much more about the terms under which mineral deposits similar to their own are being developed. In addition, many (but by no means all) of the mining and oil companies have become more flexible

in their dealings with resource owners and more willing to accept a long-term arrangement that is fair both to the investor and to the owner of the resource. In the case of some minerals, including oil and copper, there is a world market price that can be used in calculating a fair distribution of the profits between a mining company and the resource owner. All these developments have increased the bargaining power of resource owners; but it is still necessary to have the determination to use that increased bargaining power. If an Indian tribe — or, for that matter, a developing country's government — has the determination to insist on a fair deal, the negotiating tools are now available to help achieve that objective.

The remainder of this paper looks at how to achieve a fair deal in practice. The paper concentrates on one mineral — copper — and on the recent experience of the developing countries that are major exporters of copper on the world market. But the conclusions, modified to fit the different economics of different minerals, would apply also to other minerals and to groups like Indian tribes that have effective ownership of their natural resources. The paper looks in detail at financial questions but also deals with issues like local employment and training, conservation, management and control.

## 2. HOW MUCH IS A RESOURCE WORTH?

In the case of a mineral like copper, which is widely traded throughout the industrialized world, it is usually fairly easy to determine the final value of the mineral, in a form ready to be used by industry. For example, copper in international trade is usually valued at the price set from day to day on the London Metal Exchange. In the United States, prices are determined by the major producing companies (Kennecott, ASARCO, Anaconda) for most copper, although small amounts are traded on the commodity exchanges. In all these cases, the final price of a pound of refined copper can easily be established.

In the long term (ignoring temporary price variation caused by market speculators and crises such as strikes), the final price of copper will tend to be related to the supply of and the demand for the metal. Demand is affected by the overall level of industrial production. In particular, demand for copper is related to the level of activity in the electrical and construction industries, which are the major consumers of copper. During the recent recession in the United States, for example, copper consumption dropped from 2.2 million tons in 1973 to 1.4 million tons in 1975. Demand can also be affected by the substitution of other materials for copper. Recent examples of substitution include the use of aluminum instead of copper in car radiators and the development of glass fibers to replace copper wire in telephone cables. Despite the steady substitution of aluminum for copper during this century, however, copper consumption has maintained a steady upward trend.

The supply of copper comes from mines and from the re-use of copper scrap (which accounts for about one-quarter of the total supply). Because there is usually a long time between the decision to go ahead with development of a mine and the time the mine actually comes into production (three to five years is normal), there may be time when supply from the mines is either greatly in excess of demand or greatly inadequate. This inability of suppliers to respond quickly to market conditions helps to account for the very wide price changes that occur for copper within relatively short periods of time. When there is a shortage, buyers will bid up the price very rapidly, and when there is a surplus, it will take a long time before suppliers reduce production to an appropriate level (which means in practice that some mines will have to shut down).

The long-term average price of copper, expressed in 1976 prices, is a little less than \$1 per pound. But the price can vary widely; for example, in 1974, the international price of copper reached nearly \$1.40 per pound in April and dropped to 55 cents per pound by December. But even if we know the market price for refined copper which is ready to use for making wire or copper tubing, for example, we do not necessarily know how much of that price represents the real value of the copper ore in the ground, before it is mined and transformed into copper metal. To find out that value, we have to look at what happens to the ore from the time it is in the ground until it is sold to the final user.

First, the ore must be mined. This may involve deep underground workings or a huge open pit. In either

case, large amounts of capital are required for the mine and related facilities, including roads, towns, power stations, and so on. Mining also involves operating costs for wages, fuel, supplies and other necessary items.

Next, in most copper production, the ore has to be concentrated. Most copper ore mined today, especially in the United States, contains very little copper — in many cases less than one half of 1 percent. At the mine, this ore is treated to produce a concentrate that is about 30 percent copper.

Costs for these two stages of copper production average about 40 cents per pound of copper. In addition, the capital cost of opening up a new mine and concentrator averages about \$4000 per ton of annual production capacity, or about 15 cents per pound, over the life of the mine.

After concentration, the copper is smelted and refined, to produce metal that is 99.9 percent pure copper. These operations cost about 20 cents per pound or more, and costs have risen rapidly recently, reflecting the need for increased pollution control in smelter operations.

Taking into account all these costs, we can calculate how much is left after the copper ore has been transformed into metal. The average cost of that transformation is about 60 cents a pound. So that if the market price of copper is \$1 a pound, there is a surplus of 40 cents left over (if we don't allow anything for paying back capital costs). But if the market price is only 60 cents (and in the U.S. it was just barely above this level all through 1975), then there is no surplus at all.

The same kinds of calculations can be made for other minerals. In each case, it is necessary to work back from the final market price to the value of the resource in the ground by subtracting all the costs associated with transforming that resource into something that can be sold.

Once the size of the surplus has been determined, there is still the question of how that surplus is to be shared among the various people with claims on it.

### 3. WHO GETS A SHARE OF THE SURPLUS?

Basically there are five different groups with some sort of claim on the surplus produced by exploitation of mineral resources: the owner of the resource, labor, suppliers of capital, suppliers of technological expertise, and the government. In some cases these groups may be combined — for example in a developing country where the government is also by law the owner of the resource, or where a mining company supplies both the capital financing and the technological expertise to develop a mine. But for clarity we will look at the different groups separately.

- (a) *the resource owner*: basically the owner's share is whatever he can get after the claims of all other groups to a share of the surplus are met. In most cases, this depends on the owner's bargaining power. In the United States most resource owners have accepted arrangements that give them a relatively certain income, by way of a royalty of so much per ton or a certain percentage of the value of the resource, and left the mining companies to take the major risks and also the chances of massive profits if things work out well. As is discussed later in this paper, there are approaches that guarantee a resource owner some minimum income, but also allow him to participate more fairly in high profits. Where the resource owner is also a government with taxing powers, taxes often provide an effective way of claiming a greater share of the surplus.
- (b) *labor*: in most cases, especially in the United States, the labor used in mining will be paid at competitive rates and will thus not take a share of the surplus, but simply be part of the costs associated with mining. In some cases, though, labor unions acquire so much bargaining power over a mine that they are able to win wages that are well above any national scale. In this case, the wage increase will in effect use up part of the surplus that would otherwise be available to the resource owner.

- (c) *capital*: In the simplest case, where a mine is financed entirely out of loans from banks, the loans have to be repaid, with interest, out of the earnings of the mine. In copper repayment of principal and interest, averaged over the life of the mine, could add 15 cents per pound to annual costs. And if the money for mining is supplied by mining companies instead of banks, they will usually expect even higher returns on their investment than the banks get on their loans.
- (d) *technology*: the mining companies that have the experience, skill, and technology to develop mineral deposits will expect a return in one of two ways — either by earning a high profit on their investment (most copper mining companies now say they want returns of from 15 to 20 percent) or by charging directly for their services. Such charges are often used where the resource owner also owns the mining operation. For example the government of Zambia nationalized its mines in 1969, but kept the previous owners under management contracts. And Anaconda is supplying technical and management services to the government of Iran, which is opening up a major new copper mine. Whether a mining company simply charges for services or expects a high rate of return on the capital that it invests, it will expect some part of the surplus as its share.
- (e) *government*: at a minimum, governments will expect to earn the same kind of tax revenue from mining that they earn from other business operations by taxing the profits of a mining company. Where a government also is the owner of the resource, it will usually combine taxation with royalties and equity participation to try to earn a greater share of the surplus from mining than it would from businesses whose operations do not involve use of a natural resource. For example, many countries have special tax rates applying to oil companies, at much higher levels than the ordinary company tax rates, reflecting the government's view that it is the original owner of the oil. In the United States, the national government makes no claim to most mineral resources, and the tax can be expected to be at the same rate as for other businesses, and possibly less because of special deductions.

The example used later in this paper indicates how one imaginary copper mine might operate, showing how the surplus is produced and how it would be divided — if the resource owner received nothing. Using the figures in the example, the total available surplus is \$44 million. Of this, about \$12 million would be paid in federal taxes, under current law, leaving \$32 million for the mining company, or a return of about 10 percent on the total investment over time. The question for the resource owner — whether an Indian tribe or a developing country — is to determine how much of that surplus it can win for itself, and then to negotiate arrangements that ensure that it will in fact receive that amount.

#### 4. FINANCIAL ALTERNATIVES

There are four basic ways in which the owner of a mineral resources can get his fair share of the value of that resources — taxation, a share in the ownership of the mining project, royalties, and rentals of other specific payments.

Taxes are normally the most effective way of taking a share of the surplus produced by mining operations. Unfortunately, from the point of view of Indian tribes in the United States, the most lucrative taxes, based on company income or profits, are a monopoly of the federal, state and (in some cases) city governments. The sorts of taxes that can typically be levied by Indian tribes — even in those rare situations where the tribal authority may exercise local government powers — do not get at the surplus from a resource exploitation project. Some minimal tax revenue may be available in some cases, through license fees or property taxes, but this cannot be the major avenue of approach to a fair share.

In the long run, ownership of a share in the resources project may well be a major way for an Indian tribe to ensure that it gets a fair share of the revenue. In addition, ownership of even a reasonable minority share (on the order of 20 to 30 percent) is often enough to allow a substantial impact on the management and control of the project. There are several different ways in which even a group with very little money can acquire a substantial

share in the ownership of its resource developments. These are discussed in some detail later in the paper, along with ways in which groups can use their ownership to have some impact on the plans and operations of the mining project. Ownership provisions can provide a reasonable income for the mineral-owning group, in a way this income is not really a payment for the value of the minerals; it is simply the same profit margin that goes to everyone else who puts investment money into the mining project (although in the case of Indian tribes, it may be possible to avoid putting up any actual cash, through the arrangements outline below). Even if a tribe owns 50 percent of a mining project and, after it has repaid the money that was used to develop the project, earns a large return, it is still not being paid anything that reflects the basic value of the minerals. The only way to secure this payment, as well as a return on investment, is through royalty that adequately reflects the worth of the minerals.

A royalty is really a sale price for the minerals. It is a price charged by the owner — in this case the developing country government or the Indian tribe — to a buyer, the mining company, which then processes and sells the mine products. The question for the resource owner is how to set a fair price on the minerals. In practice, there are three different bases for calculating royalty — as a flat rate per ton (or per barrel for oil), as a percentage of the sales price, or as a percentage of profits.

Mineral leases on Indian land in the United States have most often included a flat rate royalty — so many cents per ton of coal, copper, or whatever. Even in those few cases where flat rate royalties may have seemed fair at the time the lease was signed, inflation has made them, almost without exception, grossly unfair and inadequate. A royalty of 10 cents per ton of coal, for example, at a time when coal is selling for \$20 per ton, is just one-half of one per cent of the value of the mineral. This is not a fair return. The major difficulty in negotiating fair flat rate royalties is that mining companies will normally insist on a very low rate, to guard against the possibility of low market prices for the minerals. Once a tribe or a government has agreed to these low rates, it then becomes very difficult to change the royalty to keep in step with inflation and changing market prices.

A more common form of royalty in the developing countries is one based on a percentage of the market price of the mineral at the time of production. Many petroleum concessions provide for royalties of 12 ½ percent of the value. This means that if the price of oil increases rapidly, as it did in 1973-74, then the amount of the royalty also increases. Percentage royalties are also commonly used for other minerals, usually at rates ranging from 2 to 5 percent of the value of production. While percentage royalties are much more flexible than flat rate royalties, and likely to give the resource owner a large proportion of the value of the resource, they still have certain drawbacks. If, for example, a mine makes very high profits, reflecting the difference between its operating and capital cost and the price of a mineral on the market, even percentage royalties will usually return only a small proportion of that profit, or surplus, to the resource owner, yet most of the high profit actually reflects the basic value of the mineral itself, not any special skill on the part of the mining company.

A third type of royalty that has been introduced recently by some Canadian provinces and Australian state governments (whose mineral rights are roughly similar to those of Indian tribes) is a royalty based on profits. To collect this kind of royalty, the tribe or the provincial government would have to become a tax collector, assessing the income and expenses of each mining project. This involves much more work than collecting a flat rate or percentage royalty, where all that is involved is a measurement of how much has been produced and a determination of the market price. But the profit-based royalty does not have the advantage of relying directly on the surplus produced by mining, which is reflected in the profits.

An approach that the government of Papua New Guinea has taken recently, and that has been widely praised around the world, has been to combine a minimum level of returns to the resource owner (in this case the government) through royalty and basic taxation with a system for taking a very large proportion of "excess" profits produced by temporary high prices for minerals or a particularly rich deposit. In Papua New Guinea's case, this is done through an "additional profits tax," which takes for the government 70 percent in the case of minerals, and 75 percent for oil and gas of all profits once a "reasonable return" has been achieved by the mining company. If Indian tribes do not choose to exercise the taxing powers of governments, they could apply the same

principles to mining projects on their land by combining two different kinds of royalty — a percentage royalty to provide some income all the time, and a profit-based royalty that would come into effect once a company had earned a reasonable return on its investment.

The example below shows how this system could work. In this example, a “reasonable return” for the company is assumed to be about 10 percent. This is in fact better than most companies achieve (after correcting for the effects of inflation). The example provides two kinds of revenue to the resource owning tribe — \$2.5 million per year from a percentage royalty, and then, beginning in the 7th year of production, an additional \$12 million per year based on a 50 percent additional profits royalty. In this example, the “reasonable” profit was calculated according to the “discontinued cash flow” from the project, which is a measure of the total financial return over time, and is the measure most commonly used by the mining companies themselves to evaluate projects. Although this example is based on a big project, with total investment of \$100 million, the same principles would apply to much smaller projects. It is the percentage return on investment, not the total number of dollars involved, that determines when the additional royalty would be payable.

The final source of money to a resource owner comes in the form of various fixed payments. Most mineral leases on Indian land, and most concessions in developing countries, provide for a small rental payment for the area of the mining lease or concessions. These payments may be useful for providing a minimum flow of income, but they are invariably at a very low level, completely unrelated to the value of whatever minerals may be produced.

Other fixed payments often used in developing country contracts are bonuses, either at the signing of the contract, or on the attainment of given levels of production. For example, some of the Indonesian oil contracts provide for bonus payments of \$1 million to the government when a production level of 50,000 barrels per day is achieved. Relatively small bonuses payable on signing of the contract may be useful to help the tribe or government meet some of the costs it has incurred for lawyers or other consultants in negotiating the agreement.

## 5. OWNERSHIP AND CONTROL

Most developing countries' governments have decided that merely getting more money from their mining and oil projects is not enough; almost all of these governments now insist on a significant share of ownership in the projects as well, and many of them insist on majority ownership. Some recent examples include the takeover of 51 percent ownership of its copper mines by the Zambian government, the Venezuelan takeover of 100 percent of oil operations, and a new copper project in Panama in which the government has an 80 percent interest. Even very poor countries, without the money to pay for their share of a project at the start, have insisted on some ownership. Botswana in southern Africa, and Papua New Guinea in the Pacific each hold a 20 percent share in their copper projects.

One reason for wanting ownership is simply to increase the revenue that the government (or the Indian tribe) gets from the project. This is not so important for governments, which always have the option of raising taxes instead, but it is an important reason for Indian tribes to concentrate on ownership. The dividends paid by a resource project can be an important source of money for the tribe.

Another reason for having an ownership share is to learn about the mining business from the inside. Ownership can be used to guarantee that the tribe or government gets its representatives onto the bodies that make the important decisions about the project. These bodies may be boards of directors or operating committees, or merely management groups for the particular project, but whatever they are, participation in them will give the resource owners a way of learning about how the business is managed, how its economics work, and what happens to the money that it produces. If the resource owners simply sit back and wait for reports to be presented to them by the companies, it may never be possible for them to know enough about the way the industry works to evaluate the reports.

Another reason for ownership by a tribe or government is that it can help assure employment and training opportunities for local people and assure the use of locally produced goods and services to the greatest extent possible. Unless there is strong representation by local interests within the management of a mining project, considerations of employment, training, and purchasing are likely to be dominated by the often short-term financial outlook of the companies. Ownership gives the tribe or government the authority it needs to raise and to press these issues.

An ownership share in the project also gives the tribe or the government some voice in deciding how its natural resources are going to be managed. The best way to earn a quick profit for the company in a mine, for example, may not be consistent with the best long-term use of the resource. In many mining projects, companies can make their biggest profit by "high-grading" or mining the rich parts of the deposit first and leaving the lower-grade parts till later — or never. This often means that a large part of the resource cannot be used at all, because once the high-grade ore is gone, it will be uneconomical to mine the rest. A tribe or government with a voice in the management of a project could try to assure a long-term mining plan that made the most efficient use of the whole resource.

Finally, a share in ownership and management gives the tribe or government a means of influencing mining decisions that may have broader effects on the whole community — especially decisions on land use and protection of the environment. It is usually much easier to block a mining company's plan for dumping waste in the wrong place by defeating the plan inside the company than to go through expensive and time-consuming court action later.

Once a tribe or government decides that it wants a share of the ownership in a project, there is still the problem of how to pay for it. Most Indian tribes — and most developing country governments — do not have the cash available to meet even a small proportion of the capital costs involved in a major mining project. And most companies will not welcome the idea of giving away a share of their projects for nothing. But in recent years, the governments of many developing countries have worked out a variety of ways in which they can acquire ownership without having to pay cash for it. Most of these methods are equally applicable to Indian tribes.

The easiest way to simply get ownership for free - to require a company to give the resource owner a percentage of the project for nothing. In effect, this is the same as imposing a royalty; the price that the company pays for access to the minerals is the value of whatever share in the project it gives to the owner. And while companies will normally strongly oppose giving away an ownership share — because it means giving away both money *and* some control — it may be possible in some cases to negotiate this free share. But it will rarely be possible to negotiate a very big ownership share for nothing; in most cases, it would be limited to perhaps 5, or at most 10, percent of the project. Any greater share would almost certainly make most mining projects uneconomical from the company's point of view and would be very strongly resisted. And a small ownership share of, say, 5 per cent will not normally be enough to give the tribe or government an effective voice in how the project operates

A more common approach is for the government or tribe to take a "carried interest" in the project. Under this arrangement, the mining company pays *all* the costs of development, and the tribe or government then pays back the company after commercial production begins, out of its share of the production. The example below shows how this arrangement would work for a small mine, with an initial capital cost of \$10 million, and annual production with a sales value of \$5 million, in which the tribe had a 30 percent carried interest. This kind of arrangement has been used very often in the oil industry between companies and governments, but it can also be applied to other kinds of mining projects. The advantage of a carried interest is that it gives the tribe or government an immediate ownership position in the decisions, without using any cash. In addition, once the loan is paid off, the tribe or government will normally receive a reasonable income from its ownership share. Carried interest agreements usually also contain provisions requiring the company to sell the other party's share of

production on its behalf, if the tribe does not want to go into the copper or coal marketing business itself. A carried interest arrangement can often be the most effective way for a poor group, whether a tribe or a developing country government, to participate in the ownership of its own mineral resource projects.

Another way for a tribe or government to acquire ownership in mineral projects is simply by borrowing the money directly from the company, but without entering into a carried interest agreement. This is what Zambia did when it obtained a 51 percent interest in its copper mines by issuing bonds, repayable over 8 years. The disadvantage of direct borrowing, compared to carried interests, is that a loan will usually require repayment of a certain amount every year, no matter how much the mine produces. In a year when, for example, copper prices are low and operating costs are high, this might mean that the tribe's share of production was less than the amount it was required to repay. In contrast, most carried interest arrangements match the amount of repayment to the value of production, so that the tribe never has to dig into its own pocket for money. This also ensures that the loan is paid off as fast as possible, since all available income from production — say 50 percent — to be used to pay off the loan, with the rest to go directly to the tribe from the first year of commercial production. This would ensure some revenue flow to the tribe as soon as possible, although it would mean that it would take longer to pay off the loan.

Finally, a tribe or developing country government could arrange to finance its share of a mining project by borrowing from some outside source of finance. One source, of course, would be the commercial banks. Banks have in fact financed the governments' ownership share in many mineral projects around the world. But a loan from a commercial bank has many of the same disadvantages as a loan from the mining company; it must usually be paid back in a set number of years, and there is always the possibility that the revenue from mining production will not be enough to meet the repayments.

An alternative for developing country governments is foreign aid, or low-interest loans from agencies like the World Bank, to pay for their share of equity in projects. While these sources are not available to Indian tribes, there is one international approach which might be adapted for use by tribes. This is the idea of a revolving fund for mineral exploration and development. The United Nations has recently established this sort of fund for its members, and, on a small scale, a fund could be set up for Indian tribes. The fund would advance money for projects, then paid back from each tribe's share of production. In effect it would be a carried interest arrangement, with the money for the tribe's interest provided by the fund instead of the companies. As each project paid off the money that had been advanced to it, funds would become available again for new projects. Money to start the revolving fund operating could be obtained from grants or from those few tribes that already have substantial income from oil and gas projects on their land. This would be a concrete way in which different tribes could cooperate to improve all of their positions in relation to the mining companies.

After a tribe or government has worked out a way to pay for a share in the ownership of a project, there is still the problem of how it can exercise its ownership rights most effectively. If ownership does not mean anything more than sitting back and waiting for dividends to flow in, it is hardly worth the effort; in most cases there are alternative ways to get as much money out of a project, for example through profit-based royalties in the case of a tribe or taxes in the case of a government. The real value of ownership is in the opportunity it provides to exercise real control over the way the project is planned and run. And to exercise this control, the tribe or government must be represented in whatever body exists to make the key decisions. If the mining project is set up as a separate corporation, then there should be members of the board of directors representing the tribe. If the project is to be run as part of the overall operations of a large mining company, without establishing a new corporation — and this is the way most projects are likely to operate — then the most effective way to ensure representation in decision making is probably for the resource owner (tribe or government) to insist that the project be set up as a "joint venture" with the company and the tribe retaining their separate identities. Under this sort of arrangement there will normally be an operating or management committee to direct the project, on which all parties with a share in the ownership will be represented. Arrangements for mineral projects should

guarantee the right of tribal representatives to sit on the board of directors or the management committee, as the case may be, and should also ensure that these representatives have complete access to all information about the project, including all accounts, so that they are in a position to look at issues effectively.

One difficulty many governments have found is that their representatives on boards or management committee are not useful and effective spokesmen for government interests. This happens not only in developing countries but even in countries like England, where for example the government has never been able to exercise effective control over the giant oil company British Petroleum, even though it owns more than 50 percent of the shares and has two government directors on the board. In many cases the reason for this failure to exercise control is that there is no clear link from the directors back to the group they are supposed to represent. This is a particularly important issue for Indian tribes, where mining development will actually take place on the tribe's own land, and will have results that may affect the future of the tribe for generations. In these circumstances it is essential that the tribal representatives on the board or operating committee be directly and regularly responsible to the tribe as a whole, through whatever communications devices seem sensible. The tribal or government representative should report back regularly, and, where necessary, should delay crucial project decisions until the people whom they represent have had an adequate opportunity to consider the issue and arrive at a point of view on it.

### EXAMPLE OF COPPER MINE FINANCES

ORIGINAL CAPITAL INVESTMENT	\$200 MILLION
ANNUAL PRODUCTION	50,000 TONS
OPERATING COST	\$ 44 MILLION (40¢ PER POUND)
SMELTING AND REFINING CHARGES	\$ 22 MILLION (20¢ PER POUND)
VALUE OF COPPER (\$1.00 PER POUND)	\$110 MILLION
OPERATING SURPLUS	\$ 44 MILLION

THIS \$44 MILLION CAN BE SPLIT UP INTO:

(A) TAXES — \$12 MILLION (ALLOWING FOR TAX DEDUCTIONS)

(B) CASH FLOW TO MINING COMPANY — \$32 MILLION  
 NOTE: EXAMPLE ASSUMES (I) THAT RESOURCE OWNER GETS NO RETURN AND: (II) THAT ALL FINANCE WAS ORIGINALLY PROVIDED BY MINING COMPANY.

### EXAMPLE OF ADDITIONAL PROFITS ROYALTY

	—YEAR—											
	1	2	3	4	5	6	7	8	9	10	11	12
CAPITAL INVESTMENT	50	50										
VALUE OF PRODUCTION			50	50	50	50	50	50	50	50	50	50
OPERATING COSTS			10	10	10	10	10	10	10	10	10	10
DEPRECIATION			10	10	10	10	10	10	10	10	10	10
PERCENTAGE ROYALTY (5%)			2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
COMPANY PROFIT			27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
FEDERAL TAX			13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
COMPANY CASH FLOW (PROFIT AFTER TAX PLUS DEPRECIATION)	-50	-50	+24	+24	+24	+24	+24	+24	+24	+24	+24	+24
ADDITIONAL PROFITS ROYALTY (50% OF "EXCESS" CASH FLOW)			-	-	-	-	-	-	12	12	12	12

## EXAMPLE OF CARRIED INTEREST ARRANGEMENT

	—YEAR—										
	1	2	3	4	5	6	7	8	9	10	11
Capital Cost (paid by company)	10										
Value of Production		5	5	5	5	5	5	5	5	5	5
Operating Costs		2	2	2	2	2	2	2	2	2	2
Company Loan to tribe	3										
Tribe's 30% share of production		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
Tribe's 30% share of operating costs		.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
Net available to pay off loan		.9	.9	.9	.9	.9					
Interest payable on loan from previous year		.3	.2	.2	.1	-					
New loan balance		2.4	1.7	1.0	.2	-					
Net cash to tribe after loan is paid off							.7	.9	.9	.9	.9

### NOTES:

In this example, the mine is developed in one year at a total cost of \$10 million and then produces minerals valued at \$5 million a year over a 10-year period. The tribe as a 30 percent "carried interest," under which it borrows the \$3 million for its share of capital costs from the company, and then uses its 30 percent share of production, after operating costs, to pay off the loan. Interest on the loan is assumed to be 10 percent.

## 6. NON-FINANCIAL ISSUES

In addition to maximizing their financial returns from mining projects, the governments of developing countries have been very anxious to use the mines for other purposes as well. Many of the provisions that developing countries have insisted on for training and employment of their citizens, purchasing of locally produced goods and supplies, and support for local business development can easily be adapted to fit the needs of Indian tribes.

Most new mining projects require a variety of skilled employees, ranging from geologists and engineers to electricians, pipefitters, heavy equipment operators and so on. There are few projects any more than require men simply to go down under the ground and dig out the ore. Mining has become a highly technical industry, and the same skills that are useful in mining operations can very often be used in other jobs as well (especially in the construction industry).

Even though mining projects require skilled employees, there is no reason why the great majority of these employees should not be from the immediate area — in particular, in the case of mining projects on Indian land, there is no reason why training programs cannot be set up so that virtually all jobs can be held by Indians within a reasonable time. An example of what a mining company can do to provide training if it wants to is the big Bougainville copper mine in Papua New Guinea, with a total work force of more than 4000. This is one of the most modern, most highly technical mining projects in the world, yet it is located in a country with one of the lowest levels of education and literacy. But the company, by starting training programs as soon as it started development of the mine, has been able to hire Papua New Guinean citizens in more than 80 percent of all jobs, and in 100 percent of such jobs as equipment operators, welders, electricians and other skilled trades within three

year. . . . situation in many other mining projects in  
develop. . . . the work force for many years. But it does  
show what . . . (the government) insists on a vigorous training  
program and str.

Similarly, agreements for the development of mining projects often provide for the maximum possible use of locally produced goods and services and for mining company encouragement and support of local businesses. The typical "company town" arrangement, in which housing food stores, taverns, gas stations and everything else are owned by the company is a model that has been rejected in many developing countries. An agreement for a mining project could in fact require the mining company to assist local residents in setting up these kinds of businesses to service the mining community. This sort of arrangement would also provide the possibility of jobs for people unable to work directly on the mining project.

## 7. CHANGING OLD AGREEMENTS

The idea in this paper can be applied both to new mining projects and to those where there is already a lease or an agreement in force. It is of course easier to negotiate many of these points with the mining company in an agreement for a new project. In the case of existing projects, usually operating under leases negotiated by the Bureau of Indian Affairs, the companies will try to claim that they have a binding contract that cannot be broken or altered. But this is exactly what the companies have been saying for years to the governments of developing countries, when these governments sought to change the mineral concession agreements that had been negotiated by the old colonial powers. In practice, if a tribe or a government wants to change the conditions under which mining takes place — whether by increasing its financial return from the project or by imposing new requirements for training and employment, or by acquiring a share in the ownership of the project — it will be able to do so if it has the determination and will power to stand firm in negotiations with the companies.

On purely legal grounds there are often good reasons to insist on a change. Often the circumstances have changed so much since the original lease was issued or the original agreement signed that a tribe will be legally justified in seeking to change the terms of exploitation. The idea that a fundamental change of circumstances is adequate grounds for reviewing and changing contractual commitments is one that is widely accepted in legal circles. Even where there are no purely legal grounds for change, though, there are often good moral grounds. In more cases, the mining company will have long ago recovered its original investment and earned a reasonable profit. An Indian tribe should feel fully justified in such a case in taking a very strong stand in favor of getting a much greater share of the proceeds. And even in relatively new projects, the tribe, if it has the determination, can win a better deal. For example, the new government of Papua New Guinea renegotiated the concession agreement for the Bougainville copper mine in 1974, only two years after the mine began production and before it had fully repaid the original investment. The key to renegotiation is not the legal situation, but the desire to secure a fair deal.

## 8. SUMMARY

This paper outlines a number of different ways in which resource owners, including both Indian tribes and developing country governments, can obtain a fair share of the value of these resources when they are exploited. Any particular project will have its own special problems, and will need to have an agreement and mining lease tailored to its special needs. As a general model, though, something like the following might be expected to produce a fair return:

- (a) a small bonus payment from the mining company to the tribe to cover the actual cost of negotiating the agreement;
- (b) area rental or lease payments beginning as soon as the agreement is signed;
- (c) a percentage royalty, paying the tribe a certain share of the market value of whatever minerals are produced;

- (d) an additional profits royalty, to come into effect once the mining company has earned a "reasonable return" on its investment;
- (e) provisions for a carried interest arrangement, through which the tribe can acquire a share in the ownership of the project (or alternatively, financing of this ownership share through an Indian revolving fund for mineral development); and
- (f) appropriate provisions for training and employment of Indians in the mining project, and for promoting the development of Indian-owned businesses serving the mining community.

Achieving all this will not be easy for any group; the mining companies are tough opponents, concerned with keeping the maximum profit they can. And much of the existing law is on the side of preserving existing arrangements, not changing them. But once a group has made up its mind to get a better deal (and, if necessary, has secured whatever outside technical advice it needs), that group can exercise a great deal of power. Events of the last few years around the world have made it clear how much the industrialized countries depend on supplies of energy and mineral resources, and how big a share of the value of those resources their owners (most notably the developing country governments and the OPEC countries) are able to obtain. There is no reason why Indian tribes should be left out of this pattern of change.

**APPENDIX III**  
**INDIAN RESOURCE PROJECTS**  
**A NOTE ON POSSIBLE FORMS OF TAXATION**

By Stephen Zorn

**INDIAN RESOURCE PROJECTS — A NOTE ON POSSIBLE FORMS OF TAXATION**

The general power of Indian tribes to levy taxes on persons and property within the territorial limits of the tribe's authority is well established in law. And at first it might seem that taxation would be an effective method for tribes to use to assure themselves adequate financial returns from the exploitation of their natural resources. Certainly many developing countries have used tax systems effectively. In some cases, taxation has been more efficient than actual government ownership of mining and oil projects as a means of gaining revenue. But there are two important reasons why taxation may not be the best approach for Indian tribes. First, there are great administrative difficulties in setting up a tax system and enforcing it against a large, financially sophisticated company. Second, there are difficult legal problems which make taxation by Indian tribes of U.S. companies less satisfactory than taxation of these same companies by the governments of developing countries in other parts of the world.

The remainder of this note first describes one possible tax system — which has in fact been put into effect in the country of Papua New Guinea for mining and oil projects and which is widely regarded as one of the more sophisticated and effective tax systems in the world — and then goes on to indicate the extent of the administrative and legal difficulties that would be involved if an Indian tribe wished to apply this sort of taxation to natural resource projects on its land.

*1. Taxation Systems*

The minerals and energy resources tax system adopted in Papua New Guinea has three basic objectives: (1) to ensure that the people of the country, through the government, receive a fair price for their resources; (2) to capture the lion's share of any excess profits, resulting from high prices on the world market or other factors beyond the control of the mining or oil company; and (3) to allow a reasonable rate of recovery of funds by the people who originally put up the money for the project, so that it can be financed.

Part of the "fair price" that Papua New Guinea receives for its copper and oil is in the form of a royalty. But

this is deliberately kept at a very low level — 1 ¼ percent of the market value — because a high royalty can often prevent the development of a project entirely or, even more serious, can lead to the mining of a deposit in a way that takes only the rich, high-grade ore and ignores the lower-grade minerals, which may just be left behind forever.

The main element in the “fair price” in this tax system is a basic income tax applied to the mining or oil company. In the case of copper, this tax is at a rate of 43 percent of income; in the case of oil the rate is 50 percent. In addition, the deductions which companies can claim are strictly limited. Only amounts actually spent for operating expenses, interest on loans, and for capital equipment can be deducted. There are no extra deductions for “depletion” of the resources; after all, the resources belong to the people of the country, not to the company that is permitted to mine it. Capital expenditures in copper mining are amortized over 15 years and those in oil over 10 years. This means that in normal circumstances a company cannot avoid taxes at the start of a project by taking large deductions for capital spending.

The second objective of the tax system is to capture the lion’s share of any excess profits. In both mining and oil, profits may be very high for reasons completely beyond the control of the companies involved. For example, when the Organization of Petroleum Exporting Countries (OPEC) raised oil prices in late 1973 and 1974, one result was that the profits of the oil companies increased substantially. And in copper mining, the price that companies receive can vary greatly, depending on movements on the world market. For example, between April 1974 and mid-1975, the market price of copper fluctuated between \$1.40 and 50 cents a pound. The Papua New Guinea tax system takes account of these possibilities for high profits by imposing an “additional profits tax” over and above the basic income tax. This additional profits tax comes into action when a mining or oil company has earned what is considered to be a reasonable return on its investment. There has naturally been disagreement between the government and the companies over what is “reasonable,” but the standards that the government has adopted are a return of 20 percent for copper mining and 25 percent for oil, reflecting the greater risk usually associated with oil exploration. (These figures are calculated on the basis of a “discounted cash flow” rate of return, which is a way of measuring the total profitability of the project over a period of years, not just in any one year. Discounted cash flow is also the method used most often by the companies themselves to evaluate their projects.) Once these threshold rates of return have been reached, the companies pay both the basic income tax and an additional tax. The effect of the additional tax is to raise the total tax rate to about 64 percent in the case of copper mining and 75 percent for oil. In this way a project that is highly profitable in its early years, because of high market prices, will quickly move to paying a high rate of tax, while a project that is less profitable at first will only pay the basic tax rate.

The third major element in this tax system is an allowance for a reasonable rate of payback to the people who put up the money for the project. In most mining and oil projects, especially those in developing countries, the bulk of the money is provided by commercial bank loans to the mining or oil company. Usually the banks will insist on some fairly sure way of getting their money back. The Papua New Guinea tax system takes this into account by allowing speeded-up deductions for tax purposes in each of the first four years of a project if the normal after-tax income would not be enough to pay back the sources of finance. In effect, a mining company can reduce its taxes in the early years if it needs the money to pay back the banks. But if this happens, then the deductions are no longer available later on in the project’s life, and taxes after the first four years will be higher.

Thus even without royalties or a share in the equity of a project, a government using this kind of tax system would receive very substantial amounts of money from a reasonably profitable mining or oil project. But there are important reasons why it may be difficult to adapt the same kind of tax system for use by Indian tribes.

## 2. Administration

Even a fairly simple tax system requires a large and highly trained bureaucracy to administer and enforce it. This is especially true when the taxpayer is a large, sophisticated corporation, like most of the mining and oil

companies. It is often very easy for corporations to distort their financial results — for example, by inflating the cost of goods and services that it uses, or by borrowing money from an affiliated company at unreasonably high rates of interest in order to avoid reporting large amounts of what should be taxable income. Many developing nations — even some with large and well-educated staffs of tax collectors — have been cheated out of tax revenue by large American corporations. If a country or an Indian tribe adopts taxation as its major source of revenue from natural resource projects, it must be fairly certain that it has, or can hire, the administrative skills to assess and collect the taxes.

In some cases, it may be possible to get a fair assessment of taxable income by relying on the companies' U.S. federal tax returns. But in the case of a single project on Indian land that is undertaken by a large company with a variety of other interests, this may be unproductive. What an Indian tribe would want to know is: how profitable is this one project? But the federal tax returns would group that project with all the company's other business, and so would still require additional expert work to sort out. In addition, the Indian tribe might want to allow different kinds of deductions, or different rates of deduction, than are allowed under federal tax law, and this would require an entirely new tax return, together with the administrative apparatus to assess and enforce the tax system.

Establishing a large, sophisticated tax system for a single taxpayer — a mining or oil company on Indian land — would be difficult and expensive. And most Indian tribes might prefer to use the services of their educated members in other, more immediately productive ways. While some of the same administrative problems exist in connection with other forms of revenue from resources, including Indian ownership of a share in the project or profit-based royalties, the administrative issue is most severe with respect to taxes. Where an Indian tribe has an active ownership role, it can expect that some of its members will gradually become experts in the business and will be in a position to protect the tribe's interest. And even in the case of determination of profits for royalty purposes, it is normally easier to hire appropriate expertise (for example a major accounting firm) than in the case of taxation. Unless the natural resource involved is so large that it can pay for setting up and staffing a sophisticated tax collection system, it may do little good for an Indian tribe to adopt tax measures of the kind discussed above.

### 3. Legal Issues

A major difference between taxes levied by developing countries and those that might be levied by Indian tribes is their effect on the federal tax liability of a U.S. corporation. Under Section 903 of the Internal Revenue Code, most income taxes imposed by foreign governments on U.S. corporations give rise to a "tax credit." This means that every dollar paid by a corporation in tax to the foreign government (within certain limits) has the effect of reducing the corporation's U.S. tax bill by one dollar. In effect, the bulk of taxes collected by the foreign government are really paid by the U.S. authorities, who would otherwise have taxed the corporation. No similar provision exists in respect of taxes that might be levied by Indian tribes. At most (and even this does not appear absolutely certain) taxes paid by a corporation to a tribe would give rise to a *deduction* for federal tax purposes, instead of a *tax credit*. The corporation would still have to pay federal tax on the income remaining after the Indian tax was imposed. The following example shows how this affects the corporation. In each case income before all taxes is \$100, and both the Indian or developing country tax rates and the U.S. federal tax rate are assumed to be 50 percent:

	Indian Tribe	Developing Country
Income before tax	100	100
Indian or dev. country tax	50	50
Amount subject to federal tax	50	100
tax credit	0	50
actual federal tax	25	0
amount left to company	5	50

This means that, from the point of view of a company considering an investment project on Indian land, a tax system like that described above would have a very severe impact indeed. And in order for that impact to be reduced to the point where a company would consider it acceptable, the rates of tax imposed by the tribe would have to be reduced to very low levels. When combined with the administrative problems associated with setting up and enforcing a new tax system, these legal issues make taxation a less attractive alternative for Indian tribes than it is for developing country governments.

Kinds of taxes other than income taxes do not need to be discussed separately, since in fact levies like sales taxes or severance taxes are no different from royalties. The basic question for the tribe to ask in looking at any of these devices as a possible source of revenue is: is this the most effective way of gaining revenue from the mining project, and is it consistent with the best long-term use of the tribe's natural resources?



## CHAPTER 7

### DEALING WITH FINANCIAL INSTITUTIONS

*"As a member of the boards of about ninety-five Native owned businesses in the United States and Canada, I will tell you that the main problem I see with any type of business development is that very, very few Native Americans — in fact, very few Americans — understand finance, the business of buying and selling. More importantly, of all the companies I have seen, only those companies who really understand the banking and financing function can reasonably expect to be successful."*

- Jack Rushing  
Assistant Vice President  
First City National Bank  
of New York

There are eight types of banks in this country and *they are all in the business of buying and selling money for profit*. If you substitute the word "value" for money, then you pick up every type of financial intermediary. Always remember that the key word is *profit* in the banking business just as it is in any business.

In order to understand how to deal with financial institutions, it is important to understand who they are, what they are and how they affect the money supply.

#### What is Money?

Many people think of money simply as the currency (paper money and coins) which the government funnels into general circulation, no matter where it ends up. Bankers and economists regard money in terms of how it is used, and say it must perform three functions to be real money:

- 1) A means of payment for goods and services that is accepted by everyone.
- 2) A standard value.
- 3) A store of purchasing power.

At any given time, the U.S. supply of money — the only kind that meets all three standards — is generally considered to be the total of all the currency people carry in their pockets plus what they have deposited in bank checking accounts. This is active money — what economists call M1 — readily available for spending. At the end of 1973, the money supply totaled \$270.4 billion, of which 77 percent was in checking accounts and the rest in cash.

Another \$570.7 billion held in savings accounts is called “near-money” because it is not a readily available means of payment, since a financial institution can require a certain number of days notice to withdraw money from a savings account, although this notice requirement is seldom imposed. Money held in savings accounts still is a store of purchasing power, but it cannot be easily converted into spendable cash.

It is through the nation’s banks, with their power to accept checking accounts and to make loans and investments, that virtually all the U.S. money supply flows.

Next to Indians, the banking industry is probably the most regulated entity in the United States. Three federal agencies and fifty state banking authorities supervise the banking industry to see that it is financially sound and serves the needs and convenience of the public. The Office of Comptroller of the Currency was created in 1863 as an arm of the U.S. Treasury Department. It charters and supervises the 4,600 “national” banks and examines each of them at least twice a year. The Federal Deposit Insurance Corporation was created in 1933 and insures each bank account for up to \$40,000 in the event of bank failure. All national banks must carry FDIC insurance and virtually all the 14,000 banks do.

### **What is the Federal Reserve System?**

The Federal Reserve System was established in 1913 following a series of bank panics that resulted from recurring heavy demands for funds held by a few large banks in the financial center of New York and Chicago, where banks in smaller cities and rural areas kept their reserves and excess deposit funds. The system was designed to correct this chaotic situation by serving as a central pool of funds and an elastic supply of bank credit and money to meet fluctuating demands.

The Federal Reserve System is composed of twelve district banks with twenty-four branches coordinated by a seven-member, policy-making Board of Governors in Washington. It regulates the flow of bank credit and money for member banks, monitors U.S. economic conditions, provides currency and loans to member banks, helps all banks collect and clear checks written elsewhere in the country, transfers funds among cities, and acts as banker for the federal government.

Fewer than 6,000 banks are members of the Federal Reserve System. All 4,600 national banks must belong, but only 1,100 of the more than 9,000 state-chartered banks have chosen to become voluntary members of the system. Altogether, Federal Reserve System member banks account for only about forty percent of all U.S. banks, but they control nearly eighty percent of all bank deposits. This gives the Federal Reserve commanding influence over the bulk of the nation’s money supply.

While national banks are examined by the Comptroller of the Currency, the Federal Reserve has the power to examine both its national and state-chartered members. In practice, however, it regularly supervises only state-chartered members, which are also examined by the appropriate state regulatory authorities. Insured state banks outside the Federal Reserve System are examined by the FDIC and state bank supervisors. Thus, only the 206 uninsured state banks are regularly examined by state authorities alone.

### **How Does It Affect the Money Supply?**

1) The Federal Reserve’s most important task is to help keep the economy healthy and growing, with production and employment high and the dollar stable, by using its control over the flow of money and credit to

head off the disruptive extremes of excessive expansion or recession, inflation or deflation. To do the job, it has three important tools:

a) Reserve requirements. The Fed requires member banks to keep a certain percentage of their deposits in reserve. Those reserves are set aside in the form of cash in the bank's own vaults or in a reserve account — similar to a checking account — with the nearest Federal Reserve bank.

b) Discount rate. This is the interest rate member banks must pay to borrow money from the Federal Reserve.

c) Open market operations. This is the buying or selling of government and non-government securities on the open or "money market," where banks and businesses also trade in debt instruments of various kinds.

To understand the Federal Reserve's clout in using these tools, it is necessary to consider how the banking system uses money. Suppose the Fed's reserve requirement is 10 percent. When Bank A receives a \$10 deposit, it must set aside 20 percent or \$2 in reserve, but can lend or invest the remaining \$8. Now suppose a customer borrows that \$8 and uses the money to pay a creditor, let's say a grocery store. The grocery store deposits that \$8 in its bank, Bank B. After meeting the 20 percent reserve requirement by setting aside, \$1.60, Bank B still has \$6.40 to lend to someone else. This rippling "multiplier" effect means that the original deposit of \$10, after repeated loans and deposits, will have grown to nearly \$50 before it is all used up, assuming no one decides to put his or her money under a mattress along the way. In other words, \$40 was "created" by the banking system and added to the U.S. money supply from an initial \$10 deposit. (Note: It's important to recognize that money is "created" by the banking system as a whole through a series of transactions, not by an individual bank in one fell swoop. No bank can lend more than it receives in deposits, minus the reserve requirement. If we go back to that original deposit of \$10, it's obvious that Bank A could not lend out nearly \$40 based on the \$10 deposit.)

This "multiplier" effect enables the Federal Reserve to stimulate or restrict growth of the money supply to maintain economic stability. If money is scarce or "tight," competing demands from borrowers will drive interest rates higher and eventually borrowing will become too expensive. Business will forego plans to invest in new equipment or hire more employees, individuals will put off buying that new car or television set, and the economy will begin to slow down. If the situation persists, it can lead to economic recession.

If money is too plentiful or "easy," interest rates drop. Plentiful money increases demand, which in turn outruns the economy's ability to produce more goods and services. Consumers start bidding up prices on increasingly scarce goods and the result is inflation.

The Federal Reserve System can counteract both situations. In a recession when the economy needs stimulating, the Federal Reserve System can buy securities on the open market, and the money it spends will flow into checking accounts to be multiplied in loans and investments. If easy money threatens to cause inflation, the Federal Reserve System can sell securities, soaking up money from private dealers who pay for them out of their checking accounts. The money supply then contracts; interest rates begin to rise, and the economy cools down.

Likewise, by raising discount rates, district Federal Reserve Banks can make it more expensive for member banks to borrow. This tends to discourage banks from borrowing to meet heavy demands for loans, or to help force them to pass their higher costs in the form of increased interest rates to their loan customers.

Finally, a change in reserve requirements affects money supply growth. Lowering reserve requirements permits members banks to increase the amount of money they lend — with the ripple effect of "creating" new money. And increasing the requirements forces them to cut back on the amount of money they lend with the opposite effect.

The Federal Reserve has found open market operations and occasionally changes in reserve requirements much more effective than the discount rate in adjusting the money supply faucet. Consequently, discount rate changes — which are at the option of each district Federal Reserve Bank, but usually rise or fall uniformly — generally follow rather than lead the ups and downs of commercial interest rates as determined by supply and demand. Thus we see how banks are controlled.

### **What is a Bank?**

A bank is a business, making profit by attracting funds from some customers and lending those funds to others. Its basic function is to serve as a financial middleman who arranges contracts between one person who wants to put his idle cash to work earning more money, and another who wants to borrow cash for his personal and business needs. The bulk of the money banks use for loans and investments comes from demand deposits (checking accounts) and time deposits (savings accounts), which totaled \$687.5 billion at the end of 1973. The rest, bringing the total to \$776.6 billion, came from their shareholders and from the banks' own borrowings.

Interest is nothing more than a price. It is the price banks pay for the use of money in savings deposits and the slightly higher price banks receive for lending or investing their deposits elsewhere. Payment of interest on checking accounts is illegal, but a growing number of banks give customers an implicit return on those funds by not charging a service fee for checking accounts. In 1973, banks earned \$53 billion in revenues, mostly from loans and investments, against \$46.7 billion in expenses, including savings account interest, taxes and salaries, with net operating earnings totaling \$6.3 billion (or \$10.2 billion before taxes.)

While other kinds of institutions attract and lend savings money, in most states, banks are unique in their right under law to establish checking accounts, the linchpin of commerce and trade. Moreover, the nation's 14,000 banks stand unrivaled in their "department store" variety of financial services. Those range from reconciling a depositor's checkbook balance to handling complex international transactions for corporate customers, from managing a widow's inheritance to serving as banker for other smaller banks.

Competing with banks in wooing the depositor's dollar are three other types of financial institutions:

**Savings and Loan Associations:** The nation's 5,448 Savings and Loans were organized to obtain funds for home construction, and nearly all their deposits are tied up in mortgages. Some are owned by their depositors while others are owned by shareholders whose investments got them started. Situated in every state, about half the Savings and Loans are federally chartered, and the rest are chartered by states.

**Credit Unions:** These 23,000 — plus nonprofit savings institutions — have member-depositors with a common bond, usually the same employer. Their dividend-earning savings are loaned to other members needing money for consumer purchases or home improvements.

**Mutual Savings Banks:** Operating in only 17 states, mainly in the Northeast, the approximately 500 Mutual Savings Banks are mutually owned by their depositors, who receive interest on their savings accounts from bank profits. Most loans are made to persons buying a home, either in their immediate area or in other parts of the country. Mutual Savings Banks also hold sizable corporate and tax-exempt bond portfolios.

In addition, a small number of Morris Plan or industrial banks operate in about two dozen states, generally in the Middle and Far West. First established in 1910 to provide short-term personal loans to blue collar workers, these institutions and their imitators grew to a peak of more than 400 in the late 1930's. Those remaining vary in name and activities according to their state charters, but they generally specialize in consumer installment loans financed from customer deposits, sale of investment certificates, or both.

**How Do Banks Use Their Money?** Loans are the heart of the banking industry, taking up a little more than half of its total assets (total assets were \$835.7 billion at the end of 1973) and yielding nearly two-thirds of its

entire revenues. Another one-fourth of those assets is invested in interest bearing government securities. The rest represent cash in vaults or held elsewhere on reserve, buildings, furniture, and other equipment needed to conduct business.

## Loans

**Business Loans:** The biggest share (52 percent) of all bank loans, business loans are used primarily by commercial and industrial forms to invest in business expansion. They also help other financial enterprises — stock brokers and finance companies — carry out their business. The classic business loan is short-term, meaning it is repaid within one year, and usually meets seasonal needs. For example, a toy manufacturer will borrow to buy raw materials and pay his workers for months before he makes his heaviest sales for the Christmas season, and then repays the loan. So-called “term” loans are repayable in more than a year.

The big business “prime rate” is the interest banks charge their largest and most credit worthy corporate customers, and is one of the sensitive measures of the economy. In 1973, the now-defunct Federal Committee on Interest and Dividends published guidelines for a lower prime rate for loans to small businesses and farmers with assets of less than \$1 million. Traditionally, during periods of tight money, most banks have made it a practice to lend money to small businesses, farmers, and others at rates higher than those charged large corporations.

**Mortgages:** Accounting for about one-fourth of all bank loans, mortgages, are extended to help people and businesses buy real estate. More than half of bank mortgages are for home purchases, followed by purchases of business properties such as factories and office buildings, apartments, and farm property. In mortgage holdings, banks rank second to savings and loans associations, which boast one-third of all mortgages by any lender. But banks account for nearly half of all home construction loans, more than half of all home improvement loans, and the bulk of all lending for mobile home purchases. Banks also hold \$90 billion in municipal securities, more than any other group of lenders. About \$67 billion of that amount was issued to finance residential support facilities, such as transportation, utilities, schools and public services.

At the end of 1973, Americans owned \$346.1 billion in mortgages on single-family homes. About 60 percent of all such homes in the United States were mortgaged in 1971, according to the Census Bureau. One-third of all outstanding mortgages were underwritten by the Federal Housing Administration (FHA) or the Veterans Administration (VA), both of which insure repayments to the lender within statutory interest rate limitations. The other two-thirds are “conventional loans” with no such guarantee and with interest rates pegged to market conditions.

**Consumer Loans:** These loans represent 21.7 percent of all bank loans. Although banks did not enter this field until the early 1930's, they greatly expanded their consumer loans operations after World War II. Today banks lead all other lenders with nearly half of the market. Most such loans are for installment purchases, repaid with interest on a monthly basis, and the bulk of those are for cars, boats, furniture, and other expensive long-life durable goods.

In 1972, automobile loans led the list, accounting for 45 percent of all bank installment loans, followed by loans for consumer goods, personal cash (bill paying) loans, and home improvement loans. Personal cash loans include more than \$2 billion in credit extended for college tuition, and the increasingly popular “over-draft checking,” a form of loan automatically triggered by over-drawing a checking account. Interest charges on all consumer loans vary according to length of payment and type of purchase.

**Bank Cards:** Bank cards such as Master Charge or Bank Americard are also forms of consumer loans. In 1973, over 11,000 of the nation's 14,000 banks were involved in some aspect of the banking card business. At the end of 1973, outstanding card balances amounted to \$6.7 billion.

**Farm Loans:** At the end of 1973, almost 12,000 of the more than 14,000 banks in the United States held

\$22.7 billion in outstanding farm debt — more than one-fourth of the nation's total farm debt of \$81.7 billion. Banks accounted for \$6 billion in farm real estate loans and \$16.7 billion in agricultural operating loans. An estimated two-thirds of the nation's 2.8 million farmers borrow money during the year to pay expenses before crops are harvested or cattle sold, or for heavy-duty equipment repayable on a long-term basis.

### Investments

The next biggest source of banking income, making up about 20 percent, is investments. All are in various state, local, and federal government securities. Banks are generally forbidden to purchase corporate debt or equity securities except on behalf of customers. Nearly half of bank-held securities are long-term state and municipal bonds which local governments sell, usually to finance schools, roads, sewerage, and other expensive construction projects which direct tax assessments cannot cover. Interest earned on these securities is tax-free and for that reason is lower than taxable interest paid on securities offered by corporations or other debt issuers of equal credit standing. The net result is a wide, ready market for government securities — a market which frequently means that tax assessments to the average taxpayer increase more slowly than inflation.

Better than one-third of banks' investments are short-term U.S. Treasury bills and notes with constantly fluctuating interest rates, and the rest are various government agency and public corporation debt notes. Altogether, these securities account for about one-fourth of all bank assets. They are nearly default-free. Unlike most loans, and except for some long-term issues, they can be sold off quickly if a bank finds it needs cash in a hurry for other purposes.

### Trusts

Banks receive less than five percent of their revenues in trust fees for managing other people's assets for their benefit or for the benefit of their heirs, friends, or employees. Once commonly regarded as a protective haven for the very wealthy or the widow and her children, the trust has become an increasingly popular financial tool to help people of moderate means make the most of their property, starting while they are still alive.

### What Banks Are Not

Now that we understand what banks are, it is just as important to understand what banks are not.

- 1) Banks are not in the business of solving your problems; they may help you but only if you can show them it is in their own interest to do so.
- 2) Banks are not in the business of solving social problems; they may help solve some but only if they can see that it is in their own self-interest.
- 3) Banks are not in business to take unwarranted risks.
- 4) Banks do not understand the different kinds of problems related to Indian business development and will not make the effort to learn *unless* they can be shown that it is in their self-interest to do so.

### So What Are Your Options?

There are not many. The first and perhaps most enticing is to forget the whole thing. Just decide it can't be done and it's not your fault because financial institutions are unconscionable, racist opportunists. Hope that the Congress or the Bureau of Indian Affairs or the Economic Development Administration or somebody will, out of the goodness of their heart, provide you with a magic answer. Never mind that it has never happened before to any major extent. Some people don't believe the buffalo will return either.

The second option is more difficult. Learn to make the system work for you.

The largest influences on a banker's credit judgment of a business venture are quality of management, earnings history, long-range prospects for profitable operation and assets pledged as collateral. In a presentation to a financial institution, the burden of proof is on the borrower whether it be a tribe, a corporation or an individual. The better you are prepared to make your presentation, the better your chances are in receiving fair consideration.

1) *Quality of Management.* A banker will want to know how your tribe is organized — who are your elected officials, how and when they are elected, what the tribe's past history has been in managing its own business. Is there a good accounting system with provisions for checks and balances to insure fiscal accountability? True, it is technically no outsider's business to know the internal workings of a tribe but if you want to borrow money (or if you want a contract or grant from a foundation or government agency these days) the lender has a right to know what to expect or to say no. A banker will want to know how the business enterprise will be managed, who will manage it and how the structure relates to the tribal council. If the track record of the tribe has not been good, be honest about it and state straight forwardly what measures have been taken to insure future success. Your business plan must be clearly stated. What is the proposed business and what will the loan be used for? How will it be structured — a tribal corporation perhaps? Who will manage it and how? What is the product? How much will be produced? How will it be marketed? You will need financial statements not more than ninety days old — your assets minus your liabilities equal net worth. You will need cash flow projections — beginning cash plus income minus cash paid out by month for one year and by quarter for two years. You must prepare a profit and loss projection — gross sales minus cost of goods sold minus expenses equal net profit or loss. You will need an analysis of your debts and proposed debts compared to your net worth. The services of a good accountant to prepare financial documents will be an excellent investment, however, the persons responsible for seeking the loan must have a complete understanding of the documents and must be able to present them well.

2) *Earnings History.* If you have been in business before, your records must reflect accurately your profits and losses and the difference you expect the loan to make. If yours is an initial effort, you must project your earnings based on reasonable expectations or past records of similar endeavors.

3) *Long-range Prospects for Profitable Operation.* The ability to repay an installment loan is based not on liquidation of assets, as short-term credit would be, but rather on the cash flow of the business. It is essential that your receipts over the term of the loan be sufficient not only for loan repayment but also for operating expenses and net worth expansion. It is less complicated to predict earnings of a going concern than for a new venture, as past records are good indicators of future performance. Even if you are experienced, however, don't be careless or complacent about projecting earnings. Basically, the banker will want to know what will be left from your sales dollar after your expected expenses. The expenses — rent, raw materials, payroll, taxes, maintenance, etc. — can be determined easily, but sales can be elusive. Try to gather data on sales margins, projected local markets for your goods, level of competition and general economic trends. Combine the results in projected financial statements and remember again that there can never be too much information; the more detailed it is, the sooner a decision on your loan application will be reached.

4) *Assets Pledged as Collateral:* Here the tribe must be particularly imaginative and knowledgeable. While trust land is not mortgageable, crops, cattle, machinery, inventory, minerals, sales contracts for delivery of merchandise, or a lease-hold<sup>1</sup> interest may be. A lender must have confidence that any liens will be enforceable; otherwise he simply won't take the risk.

### Choosing Your Source of Credit

The purpose for which the loan is sought, the amount and the length of time for which the loan is sought all must be considered when you decide which financial institution to approach.

1) *Your Local Bank:* Your local bank should be your best source of credit because hopefully you will have an already established relationship through their handling of your tribal accounts. There are several reasons why

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<sup>1</sup> Lease-hold interest means that, in the case of an agricultural enterprise, for instance, the banker would have the right to assume the lease for the land they were financing development of for a certain length of time or until the value of the loan was received. The mortgage or lease-hold value would normally be based on the amount the tribe (or the banker) could expect to lease the land for were they not developing it themselves.

this is not necessarily so, however. One, the bank may be too small; that is, it may not have enough assets to carry a loan of any considerable size. Two, local bankers often share community prejudices and consciously or unconsciously will not give Indian requests impartial consideration. Three, your local bank may be financing your leaseman who is making money for both of them already off *your* resources. Four, the bank may not be familiar with the type business you are trying to finance and may not be willing to expand into that area. Five, he may be reluctant to enter into a deal with an Indian tribe cause of fear of additional federal regulations or complications of dealing with the Bureau of Indian Affairs or other government agencies without any clear cut understanding of what their role in tribal transactions are.

2) *Large Banks in Your Region:* Tribes have a better chance of securing loans from larger institutions which are apt to have both more assets and more expertise to draw on. Banks in your region are more apt to be familiar with the natural resources, industries and marketing potential in your area which makes it easier for them to evaluate proposed projects. Again, community prejudices and pressures may affect efforts to deal with banks in your region.

3) *The Largest National and International Commercial Banks:* Because of size, assets and expertise are more apt to be available. Decisions are less likely to be influenced by local prejudices. On the other hand, major banks give first consideration to major corporations. Competition for loan dollars will be more acute. Accessibility because of distance is also a problem.

4) *Insurance Companies:* Long-term financing is available in some cases from large insurance companies. Again competition with major corporations and distance may be a problem.

5) *Minority Enterprise Small Business Investment Companies:* MESBIC's are easier to approach because of special nature of their mission -- to assist minority businesses. Unfortunately, few if any have adequate assets and expertise to make them a likely source of funds.

6) *Specialized Lending Agencies:* One of the best examples of a specialized lending source is the Farm Credit Association. This system is comprised of the Federal Land Bank System, making long-term real estate loans; the Bank of Cooperatives which provides credit to farmer owned coops; and the Production Credit System.

The Federal Land Banks, established in 1917, provided a reliable long-term credit source for agriculture. But as the country plunged deep into the agricultural depression of the 1920's, Congress saw the need for a solid, dependable source of short and intermediate term notes of farmers and ranchers given to various other financial institutions. Because of bank failures during the depression of the 1930's, the need for the establishment of a dependable credit source at the farmer's level became apparent. Production Credit Associations were set up to fill the credit gap. Since that time, the Production Credit Associations have loaned billions of dollars to farmers and ranchers. Today, all government capital has been repaid with interest and the system is owned by its members -- the borrowers themselves. Production Credit Associations are owned by members and therefore Indians may be subjected to local prejudices, but they are still a good source for crop loans including aquaculture projects.

The Bank for Cooperatives is an excellent source of funding for Inter-tribal Cooperatives. As tribes begin cooperative efforts with each other, this source should not be forgotten.

Another specialized lending source might be referred to as "the company store." Here, again, the best examples are found in the field of agriculture though the principles could apply to any product. Large companies, say a cotton company, for instance, is dependent on the cotton grown in the area for the operation of its gins and mills. Often, the company will finance the production of a cotton crop in return for an agreement by the farmer that all the cotton produced will be sold to the gin. Some agreements may include a fixed price to be paid for the product. Others may stipulate market price at the time of the sale. The company would recoup its

loan from the proceeds when the cotton is sold to the gin and the profit would go to the producer. This kind of arrangement can be tricky, however, they can work well for both parties. The key is to remember that you've got something the company needs — the product — and they've got something you need — financing. The negotiating necessities, then, are obvious.

Tribal funds are also an excellent source of funds for tribal enterprises. If a tribe has capital, then there is no reason why you can't borrow from yourselves to finance new enterprises. Care should be taken to insure that the quality of the project and the background work is as thorough for a loan from the tribe as it would be for a loan from any other source.

7) *The American Indian National Bank*: This bank has been established by Indians for Indians and will, therefore, be more receptive to Indian needs. Two things should be remembered. One, the American Indian National Bank is federally chartered and therefore is subject to the same regulation as any other bank. Two, they are currently hampered by a lack of assets and expertise.

8) *The Indian Financing Act (P.L. 93-262)*: The Indian Financing Act of 1974 was signed into law on April 12, 1974. The Act authorizes the appropriation of an additional \$50 million to the Indian Revolving Loan Fund presently administered by the Bureau of Indian Affairs. Those funds are used to make loans to Indian tribes and individuals for economic development projects and business ventures on or near Indian reservations and for educational purposes. When the full amount authorized is appropriated, the Indian Revolving Loan Fund will total approximately \$75 million.

The Act creates a new *Indian Loan Guaranty and Insurance Fund* which will be used to guarantee or insure loans made by private lenders to Indian tribes or individual members of tribes for up to 90 percent of the unpaid principal and interest due. \$20 million was authorized for appropriation in each of the Fiscal Years of 1975, 1976 and 1977. The Act also authorizes the payment of an interest subsidy on those loans guaranteed and/or insured.

The Act establishes the *Indian Business Development Program* under which non-reimbursable grants may be made to Indians for profit-making economic enterprises on or near Indian reservations.

The Bureau of Indian Affairs will administer the programs established by the Act and only Indians who qualify for Bureau services are eligible. Following are brief descriptions of the programs authorized:

#### **Title I — Indian Revolving Loan Fund — U.S. Direct Loans**

This Loan Fund is a consolidation of existing revolving loan funds already administered by the Bureau of Indian Affairs under three different Acts of Congress: Indian Reorganization Act, Oklahoma Welfare Act, and the Navajo-Hopi Rehabilitation Act. Whereas, there were restrictions on eligibility for loans under each of the Acts listed, Section 101 makes the total revolving loan fund equally available to all Indians having a form of organization satisfactory to the Secretary of Interior. Direct loans to Indian individuals may be made in certain cases.

The Secretary of the Treasury determines the rate of interest on loans under the Act taking into account the average yield on marketable government securities. Loans will be made only where there is a reasonable prospect of repayment and only after the applicant has exhausted all avenues of reasonable financing from other lenders. Loans will not be made for a term of more than thirty years. Loans may be made for business and educational purposes.

Land purchased with a loan may be taken in trust unless it is outside an Indian reservation or tribal consolidation area. Land outside such areas may still be taken in trust if the purchaser owned a trust or restricted interest in the land before the purchase.

## **Title II — Loan Guaranty and Insurance**

The Secretary of the Interior is authorized to insure or guarantee loans to eligible Indians from private money sources. The Secretary may guarantee up to 90 percent of unpaid principal and interest on a loan. He may also insure 90 percent of the loss on a loan, but only to a maximum of 15 percent of aggregate of loans made by a lender under the Act. No loan to an individual Indian may be guaranteed or insured which would cause the total unpaid principal indebtedness to exceed \$100,000. No loan to an economic enterprise in excess of \$100,000 shall be insured unless prior approval of the loan is obtained from the Secretary. The term of insured or guaranteed loans may be no more than 30 years.

Land purchased with a loan insured or guaranteed under this Title may also be taken in trust with the same qualifications imposed by Title I. The aggregate of loans insured or guaranteed under this Title may not exceed \$200 million. The appropriation authorization for insurance and guarantee is under Title III.

## **Title III - Interest Subsidies and Administrative Expenses**

This Title authorizes a subsidy on loans insured or guaranteed under Title II so that the borrower will have to pay no more interest than the rate set by the Secretary of the Treasury for loans from the Indian Revolving Loan Fund. It also authorizes an appropriation of \$20 million each for the Fiscal Years of 1975, 1976, and 1977 to cover interest subsidies, administrative expenses of the Act, and loan guaranties and insurances.

## **Title IV - Indian Business Grants**

This Title sets up an Indian Business Development Program which can make grants of up to \$50,000 to Indians or Indian tribes to start or expand businesses for profit on or near Indian reservations. The grantee must obtain at least 60 percent of the total financing for his business from some other source and must invest his own money in the business, if he is able to. \$10 million in each of the years 1975, 1976, and 1977 was authorized to be appropriated under this Title.

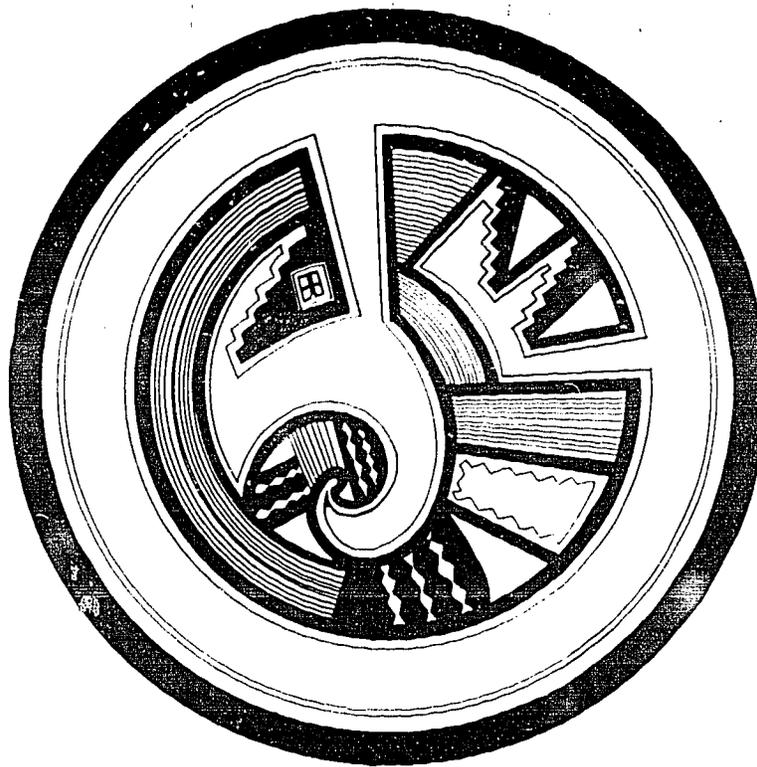
## **Title V**

Title V is concerned with providing management and technical assistance to borrowers and grantees under the Act. The Secretary must provide such assistance utilizing Federal Agencies such as the Small Business Administration or ACTION or may contract with private organizations. The Secretary can use up to five percent of money appropriated under Title III so the maximum amount that can possibly be available for contracts in any one year is \$1 million.

The Indian Financing Act has the potential for being the greatest boon ever to Indian economic development. Unfortunately, it is not being properly funded with appropriations to carry out the intent of the legislation.

## **A Final Word**

In short, don't count on banks as being easy sources of funds. You can't use the same song and dance you use for charities or foundations — it just won't work. On the other hand, it can be done by understanding their system, preparing yourself well and showing them that it is in their mercenary self-interest to deal with you.



## CHAPTER 8

### INDIAN RESERVATIONS: PLAYGROUNDS FOR THE AFFLUENT?

*"A vagabond when rich, is called a tourist."*

— Paul Richards  
from *Scourge of Christ*

(AUTHOR'S NOTE: I would like you to know before you read this that I have a very basic bias against tourism as economic development for Indian reservations. I tried very hard in researching this chapter to find something positive to balance my biased views. I could not find any convincing arguments. I apologize.)

#### TOURISM — What is it?

Tourism (toor-iz-em) n. 1. The practice of touring especially for pleasure, 2. the occupation of providing local transportation, entertainment, lodging, food, etc., for tourists.

Tourism as we know it, is a phenomenon of the last half of the twentieth century. The rising level of expenditures for tourism and outdoor recreation has no doubt prompted both the government and tribes to see a potential for development for Indian reservations. Because local Indian reservations have long been touted as quaint tourist attractions both by states and neighboring cities, it seemed obvious that Indians should be able to attract the business for themselves.

#### TOURISTS — Who Are They?

Among promoters of Indian tourism, there is a romantic notion that hotels and motels on Indian reservations are going to be filled up with those wealthy and semi-wealthy Americans who have an overwhelming desire to get away from it all on a picturesque reservation learning more about the history and culture of this country. They will come with their wives and kiddies and their money to spend a week or more in this lovely setting spending an average of a hundred dollars a day for rooms and meals and solitude.

Don't believe it. The vast majority of the hotel/motel business in this country is made up of business related travel. Business related travel includes traveling salesmen, company or industry wide conventions, conferences or retreats — any travel for business related purposes whether your business is religion, education, manufacturing, "Indian Biz", or whatever. People who attend those meetings of various kinds often take their spouses or lovers and sometimes their families but it is travel which would not happen without a business related purpose.

Many of the rest are families on their way to Grandma's house, or perhaps Las Vegas, who might spend a day or two on the road. The majority of those people will stay at a chain motel on the Interstate, with television, swimming pools and a place for the family dog.

### Where Do All The Tourism Dollars Go?

The big dollars go to multinational corporations (corporations doing business in many nations) who own major portions of the travel business: airlines, motels and hotels, travel agencies, rental cars, credit card companies, etc. Chain motels such as the Holiday Inns, Howard Johnsons, Ramada Inns, Hilton, Sheraton Inns, etc., are familiar names that people recognize and trust. Travelers know what to expect. It is easy to get reservations — any Holiday Inn will tell you where there is another one down the road and how long it will take you to get there. Some issue their own credit cards. Most have conference or convention facilities. All are nationally advertised.

The big dollars do not go to small independently owned motels whether they are owned by Indians or non-Indians.

Apart from the business and interstate travel market, another major tourism goal is found in resort areas — those areas of the country with such natural phenomena as warm weather in the winter or cool weather in the summer, mountains for hiking and skiing, or such unnatural phenomena as gambling casinos or the United States government (Washington, D.C.) — attract a major portion of the non-business related travel. They have what I call Snob Appeal. That is, if John Smith says he's taking a vacation and going to Las Vegas or Hollywood or Washington, D.C., he will evoke oohs and ahs from the family and the good ole' boys down at the bowling alley. They understand saving money all year or even borrowing money and paying all the next year for that kind of vacation. They want to do it, too. But if he said he was going to Chief Gall Inn at Standing Rock for a week, that wouldn't sound nearly as exciting — in fact, they might think that Old John had gone off his rocker. Peer approval is important: peer envy is even better.

Attempts at development of tourism for Indian tribes have generally fallen into two categories. One is the resort or hotel/motel. This requires a large capital investment for the building itself. In order for a motel outside a large city or off a heavily traveled highway to attract travelers, recreational facilities must be available. If they are not natural — a lake, a river, a mountain, the ocean — then something will have to be built. Usually, even if you have a natural attraction, additional attractions such as a swimming pool, golf course, tennis courts, etc., will be necessary. This requires an additional outlay of capital. In return for their dollars, tourists expect comfort, services and entertainment. They want properly heated and air conditioned rooms, television sets, hot water, plenty of towels, clean rooms, properly working telephones, room service, an efficiently operated front desk, a decent restaurant and a good bar. They want to be left alone if they want to be alone and they want entertainment if they want to be entertained. Conference arrangements must be efficient — reservations must be in order, catered meals and coffee breaks must be on time, and meeting rooms must be comfortable. Whatever the area's claim to fame is — gambling, beautiful scenery, ski runs, Indians, beaches — must be easily accessible which often means providing transportation. Tourists also want security. They want to feel safe in their rooms and that their belongings are safe when they leave their rooms. If a traveler has a bad experience in a hotel or motel with comfort, services, entertainment or security, he will not only not return, he will discourage others from going.

Revenue is generated by the rental of rooms but this alone will rarely support the facility. The extras — the

bar, the ski run, the golf course, the restaurant, the casino — are usually the moneymakers. During a recent large convention, the bar in the hotel headquarters is said to have taken in \$25,000 during the week long bonanza. This is probably low — there were 4,000 people. At a dollar a drink, this would have averaged about six drinks each for the whole week.

The second category is “outdoor recreation”, which has become very popular in recent years with the advent of “RECREATIONAL VEHICLES”. Campgrounds, fish ponds, ski areas, beach areas, and the like are very popular for weekend or daylong outings. These also require a substantial capital investment. They can generate revenue in the form of license fees, admittance fees, campsite fees, etc. In order to make money from this kind of tourism, the volume must be very large. A large number of non-tribal members “running loose” on anybody’s reservation creates a number of problems.

Outdoor recreation dollars go to the people who manufacture recreational vehicles, camping equipment, sports equipment and the like. They go for the groceries, gasoline, hiking boots, bathing suits, transistor radios, beer and soft drinks and the coolers to put them in. They go for the accessories to make the great outdoors as much like your living room at home as possible. Most of these things are bought in the town in which the tourist lives. Fees for use of facilities are usually minimal and often nonexistent for national and state parks.

Campers or day time tourists expect pretty scenery, clean picnic and camping areas, reasonable accessibility, sanitation facilities, clean drinking water, a feeling of security, and a convenient place to replenish gas, groceries and liquid libations. Providing these would require substantial financial expenditures for maintenance, cleanup, etc., on a reservation.

### Developing Nations Experience

When tribes consider developing tourism as an economic enterprise, they would be wise to look at the experiences of foreign developing nations. About ten years ago, there was great concern in the United States about the strengthening of the economy of the Western Hemisphere. They were basically political and economic concerns. The United States was not eager to have the countries of Latin America fall into the Communist camp, while it was eager to establish new markets for U.S. based companies.

Studies were commissioned to design programs to stimulate the Latin American economy and to effect a redistribution of wealth which would hopefully address the problems of the poor — poverty, inadequate housing, unemployment, ill health, etc. Terrence Cullinan, in a Stanford Reserach Institute report entitled *Tourism in Latin America*, gives the traditional arguments for tourism development:

- 1 strengthening of the economy by significant contributions to national income;
- 2 establishment of national identity — which in some Latin American cases might serve both outsiders and the nation itself;
- 3 preservation of national culture — by utilization of folk art and culture, establishment of protected museums, and provisions of funds for guarding monuments and retention of artifacts.
- 4 providing employment — by developing a labor-intensive industry with jobs at all scale levels.<sup>1</sup>

Gayle Grynbaum in an article “Tourism and Underdevelopment” said:

“Most arguments for tourism development claim it is a significant method for channeling dollars into an underdeveloped country and for diversifying their economy. The United States has consistently pushed tourism development as an important way to expand markets and investments. In Latin America, tourism is a relatively under-exploited industry, the major exception being Mexico. Although there have been

tourists in Latin America as far back as Cortes, as of 1968 tourist receipts for Argentina amounted to only 2.3 percent of national income; for Columbia 4 percent and for Ecuador, 3.9 percent. The reasons given for these small totals are:

- (1) Misconceptions of Latin America by outsiders, mainly from the United States:
- (2) Poor relationships with those tourists who do come — including high costs and lack of service.
- (3) Lack of interest in and support for tourism by Latin American governments.

Beginning in 1968 numerous industry studies were made to see how these three problems could be overcome. With American ingenuity, efficiency, management, and capital, it did not seem too difficult a task. At least there were permanent basic resources; no matter how intensive the exploitation of sun, snow, water, scenery, or history, there was no danger of depleting these resources, as is the case with the oil and raw materials that American industry has traditionally gone after."

In fact, very few of U.S. generated tourism dollars went into the economy of the Latin American countries. Rather, U.S. multinationals built or took over the major hotels; U.S. airlines, U.S. hotels, U.S. credit cards, U.S. construction companies, U.S. managers, U.S. technology such as restaurant equipment, elevators, etc., make the money. But the tourist industry did provide jobs. Waiters, porters, prostitutes, bellboys, messengers, dishwashers, doormen, shoeshiners and some managers (to add local flavor). The tourists are paying substantial amounts for their accommodations and entertainment but wages are low for the employees — local people. They are not pleased with their working conditions but they don't have many choices. Tourists do not receive the kind of service they want. Resentment builds up on both sides and instead of increased understanding, there are increased tensions, misconceptions, and stereotyping.

"North Americans often view their 'Good Neighbors', many of whom they cannot name, as mixtures of unsafe water, unpleasant revolutions, uncontrolled graft, uninspired backwardness and immitigable poverty, with a lot of steamy jungles and the Andes thrown in."<sup>3</sup>

But what about cultural exchange — developing a better understanding between peoples? Grynbaum says in regard to the promotion of tourism:

"What in actuality has the promotion campaign done to clear up 'misconceptions'? *It has replaced an ignorance of the region and people with racist, first class and luxury hotels.*" . . . (emphasis in original)

"Institutional and attitudinal racism of the United States, like a disease, is carried to Latin America with the influx of tourists. Rich white tourists tend to concentrate on large hotels or resorts which local populations often find are, for all practical purposes, off limits to them. *In Puerto Rico, for example, it is nearly impossible for Puerto Ricans to use their own beaches when Americans or U.S.-owned hotels are nearby.*" (emphasis in original).

Americans also have established institutions, such as casinos, in Latin America — institutions that are forbidden in the United States (except in Nevada). And once gambling is established, gangsters, drug traffic and prostitution are usually close behind.

In most tourism promotional literature there is an emphasis on local crafts. When people go to Guatemala they notice that in each village people are wearing different 'costumes', but they fail to notice the uniformity of poverty. Tourism promoters actually make a concerted effort to maintain quaint primitive villages, even to the extent of making them National Landmarks, so they can not be changed. Is this some of the idea behind preserving national culture . . . poverty as a tourist attraction?

When tourists go to Latin America filled with lovely thoughts from Cook's Travel or Diner's Club about rhythmic Latin Americas, this does not promote a 'national identity', or constructive relationships between North and South Americans. It promotes an atmosphere where people jump for tips because they are starving, where people think that the only way to achieve development is by serving the needs of the rich white foreigners, rather than the needs of one's own people. It promotes an industry which, more than any other business, is based on serving outside interests."<sup>4</sup>

Sound familiar? Listen to this:

"Indian land and Indian resources have always been important to Anglo economic interests in Arizona. The state is known for its four "C's"; cotton, cattle, copper and climate . . . Since World War II, in conjunction with the large influx of population into the state, climate has also become a resource.

Before 1940 the majority of the state's population were Chicano and Indian. Now, more and more, Anglo (white) Americans are making Arizona their home, and tourists and recreation is a big business. The 'exotic' Indian peoples and their traditions are a major feature which, along with climate, is being exploited by white-owned business interests.

Driving through the reservation areas, stopping to buy beadwork, a basket, or a similar item of Indian manufacture, camping, hunting or fishing, the tourist or urban visitor is struck immediately by Indian poverty, by the contrast between his own economic life style and that of the people on the reservations. Seemingly idle people come and go. Drunkenness is noted. A few inquiries made to reservation government officials, Anglo trading post operators, missionaries, and even to some of the Indians themselves will inform him that Indians are incapable of proper business management, of working hard and accumulating material possessions 'like the white man', of really benefiting from government educational and training program. A passing anthropologist might inform him that the cause of this state of affairs is inherent in Indian culture, that there is a 'value conflict' which prevents 'acculturation' and, hence reservation economic development. In fact, our tourist who visits the San Carlos Apache Reservation can read in the Arizona metropolitan newspapers about the financial chaos on the reservation, of the charges of tribal 'corruption'. That the state of tribal business management has deteriorated to the point that a federal audit was required and the Interior Department took control of tribal finances in November of 1973 (Akwesasne Notes 1973, 1974a, 1974b; Lewis 1974). The apparent tribal mismanagement and lack of economic development at San Carlos lends weight to the stereotype that 'Indians just cannot handle money'. It may never occur to our visitor that he, or the Anglo political-economic system to which he belongs, is part of the problem if not the cause of reservation underdevelopment and tribal business failure"<sup>5</sup>

As of June 30, 1976, the Economic Development Administration of the Department of Commerce had committed over sixty million dollars to construction of tourism and recreation facilities on Indian reservations throughout the United States.

The Bureau of Indian Affairs tells us they have provided no development funds, but have provided technical assistance regarding the development and about \$640,000 to fund the American Indian Travel Commission. The Travel Commission was formed to assist Indian tribes in developing and marketing their tourism and recreation facilities. There is no comparable information available on the return from this massive investment; however, the "moccasin grapevine" has it that not more than three projects are making money.

The same basic arguments that were made for the development of tourism in Latin America have been made for the development of tourism on Indian reservations:

1. Strengthening of the economy by significant contributions to national income;
2. Establishing the national identity of Indian nations;
3. Preservation of national (tribal) culture — by utilization of folk art and culture, establishment of protected museums, and provision of funds for guarding monuments and retention of artifacts.
4. Providing employment — by developing a labor-intensive industry with jobs at all scale levels.

There are several basic very hard questions which should be considered by tribes before they undertake tourism as economic development:

1. *Does my tribe want large numbers of non-tribal members on the reservation? Will tourists be received as guests (albeit paying guests) and made to feel comfortable and welcome? Or is there a natural resentment toward outsiders, particularly the curious folk with preconceived notions about Indians who are looking for a good deal on Indian jewelry or Indian artifacts?*

Are your tribal members willing to share or to give up the use of their beaches or lakes or mountains to outsiders? Will these outsiders be welcome at tribal functions — social events, cultural events, etc.?

2. *Is my tribe prepared to exercise jurisdiction over non-Indians? Do you have a tribal code which adequately addresses this issue? Is your law enforcement staff sufficient to handle it — enough people, enough training, enough equipment, enough money? Is your tribal court system adequate to deal with it? Are your detention facilities adequate? Do you have an agreement with neighboring jurisdictions for any assistance necessary?*

3. *Are there people in my tribe qualified to manage a tourist facility? If not, how will management be handled? Is there training available for someone who might be interested but inexperienced?*

4. *Are there tribal members who will be willing to fill the other jobs which will be created? The majority of the jobs will be menial, low paying and seasonal. Are your people interested in being maids, bellboys, bus boys, waiters, desk clerks, garbage men, etc.*

5. *Will my tribe be willing to sell and/or allow possession of alcoholic beverages? Many tribes do not allow liquor on their reservations. Since a large amount of the money in resort facilities is spent on liquor, this is a major consideration. Most campers and picnickers like to carry a cooler of beer along on their outings. Are you going to allow it, ignore it or confiscate it? How are you going to deal with abusers — drunks?*

As is the case with the development of any other natural resource, a very thorough and honest cost/benefit analysis should be made before a tribe decides on tourism as economic development.

## Why Indian Tourism Projects have Failed:

The three most often given reasons for failure of Indian tourism projects are:

1. **Lack of sufficient capital:** Tourist development is capital-intensive; that is, it costs a lot of money. The Mescalero Apache have the most successful Indian tourist facility in the country. The Economic Development Administration as of June 30, 1976, had put \$9,882,600 into the funding of a dam, lake, 140-room hotel, 18 hole golf course, marina, restaurants, swimming pool, lounge, gift shop, skeet-range, stables, tennis courts, boating facilities, conference rooms and other recreational facilities. They also have a ski area, the Sierra Blanca Mountains. They sit between Ruidoso, which is a tourist town both summer and winter, and the White Sands National Monument. It's a natural and it is truly magnificent! But even at that, if every single room was rented every single night at the rate of \$35.00, it would take over five years just to pay for the initial investment by EDA.

Further, the Mescalero defied the State of New Mexico's liquor licensing laws and ultimately had to go to court to prove that they were sovereign and not subject to state laws. They won, but litigation costs money. Even when initial capital is provided by the Economic Development Administration, tribes should remember that money available for tourism is also available for other forms of economic development. Choosing tourism may be deciding against another form of development.

2. **Lack of Management:** There are very few Indian people who have had an opportunity to gain the kind of experience needed to manage a resort hotel or an outdoor recreation area. It simply has not been an option — there has been no market for these skills. With the building of these kinds of facilities, there is now. Further, as is the case with most of the new skills Indian young people are acquiring, equal opportunity programs of government and major corporations make Indians with skills, education or training, very popular commodities on the labor market. Unfortunately, tribal enterprises have a hard time competing with the salaries the government and private industry can pay. Competent non-Indian managers are hard to attract to Indian reservations. Ideally, the tribe would provide training for one of their own tribal members who is committed to living on the reservations. This could be handled by contracting with an individual to provide training in return for a commitment for a certain number of years service or to repay cost of training over a period of time. There is a possibility of arranging an apprenticeship training program with some of the major hotel chains as part of their corporate support program. The Senior Citizens Organization for Retired Executives (SCORE) might be another source where a retired executive could be located who would be willing to train your managers.

A few years ago the Bureau of Indian Affairs provided a grant to them to train Indian hotel, motel and restaurant managers. The training program itself was very good but there was very little participation by the tribes. It is not clear whether there was a lack of interest on the part of the tribes or a lack of knowledge about the program.

The training of managers alone will not solve management problems. As is the case of any business, it must be managed as a business in the business of making money. Tribal structures must be adapted to allow for the operation of businesses as businesses.

3. **Poor marketing:** This one just plain makes me angry. Any funding agency or any tribe which goes into development of a tourist facility without a very detailed study of the marketing potential and a very detailed plan for marketing deserves a kick in the assets. Location is a major factor. Obviously, if you are sitting in the middle of a major tourist area, as the Mescaleros are, with all kinds of activities you're going to attract more tourists than if you are in an isolated area far away from a major commercial airport, interstate highways and other recreation or entertainment facilities.

The American Indian Travel Commission was created to provide assistance to tribes in the development and marketing of tribally owned tourist facilities. They have made efforts to save this sixty million dollar investment. You don't have to be much of a researcher to see that there is little hope of general success. When I drove through Albuquerque for the first time twenty years ago, Route 66 was lined with small privately owned "Mom

and Pop" type motels. Today not only has Route 66 gone with the wind (I-40), so have all those privately owned motels. Hilton, Sheraton, Holiday Inn, Ramada, etc., are visible from the Interstate but even they are having a hard time. The Sheraton Old Town Inn, just off the Interstate and in walking distance of Old Town, the city's major tourist attraction, has gone into receivership. The Albuquerque Inn and Convention Center, one of the very best convention centers in the country recently changed hands because of financial difficulties.

If these posh establishments, near a major airport and on a major interstate, with massive nationwide advertising can't make it, what hope does a tribally owned motel four hours from the nearest airport and interstate, with limited advertising have?

There is an Indian joke that says the reason there are motels on so many reservations is so the feds will have a place to stay when they go out to oversee their Indian projects. At least that is logical. Perhaps feasibility studies should include an inventory of the federal programs on the reservation and the number of times a person from the office providing funding can be expected to make inspection tours. If that is not enough to keep your "tourist facility" with a high enough occupancy rate to make money, then you may want to forget the whole thing.

However, you can use your marketing skills very effectively with the feds, too, if you use a little imagination. The following are not recommendations, merely observations of realities:

1. Let the word out that you are bringing in private consultants to provide you with an evaluation of the government's performance of their trust responsibility in regard to a particular resource. You can expect at least three feds for three days for each well done rumor. Occasionally you will have to produce a bonafide consultant to maintain your credibility, but it's probably worth the investment.

2. Let it be known that the American Indian Movement is "organizing" on your reservation and they may be planning to hold their next convention there. The Federal Bureau of Investigation should be good for a nice slice of per diem for that one. This technique can be financed rather cheaply -- all you'll need are a few bumper stickers and a couple of your CETA kids to paint AIM on their levi jackets. There are spinoff effects from this if you are smart enough to have an outlet store for plastic chokers, phony eagle feathers, worn out Levis and ribbon shirts. The undercover guys will go nuts over this one.

3. A very clever but somewhat dangerous variation of the above is to host a takeover. The state of South Dakota has this down pat. The occupation of Wounded Knee, for instance, was no doubt the greatest economic boon the state has had in many a year. They had the largest influx of FBI, U.S. Marshalls, Armed Forces, Celebrities, Attorneys, Press people, Groupies, Do-gooders and Curiosity Seekers in the history of Indian biz. Unfortunately, the reservations were not ready to take advantage of this phenomenon with their own motels, restaurants, beer joints, retail stores, etc., and the state reaped the benefits. Don't forget the spinoff effects caused by long, drawn out trials. The feds are easy marks for those. Often, too, trials cause additional disturbances which attract more of the above. There are, of course, risks involved. The cost/benefit analysis must be very well done.

4. Dedicate everything -- and invite a big wig to be guest of honor. It works best if you can get a heavy from the national office. The Commissioner of the Bureau of Indian Affairs is the best drawing card from a logistical point of view. At a minimum you will get the Commissioner plus one or two staff people from D.C. plus the Area Director and his staff, your project officer and his boss, and at least a small number of Bureau employees at their own expense who will want to touch the hem of the Commissioner's garment and establish themselves as real friends of the tribe, if that's big with the current Commish. Timing is important. Always schedule your activity so that they must arrive the night before or so that they miss the last plane in the evening. True genius is scheduling things so they must remain overnight both nights.

5. Groundbreakings are a variation of the above and almost as effective. There is something classically more appealing about cutting ribbons than shoveling dirt, however.

6. Let it be known that there has been an archaeological discovery on your reservation. This may not appear, at first glance, to be tapping the federal resource. In a very short time, however, you will find that a number of noted anthrop and archae ologists have received grants to come and retain your culture. A word of caution, if your tribe doesn't already have one, be sure to invent a taboo against spending the night in the area of the dig. Be sure they are required to stay in your motel. Care should be exercised when marketing this kind of endeavor that you don't make a mistake and announce your find in an area that actually has sacred and cultural significance for your people. That would be awful.

### **Is Tourism on Indian Reservations Racism?**

There is something innately racist in using peoples and cultures as tourist attractions. Even worse, for people to use themselves as a tourist attraction is debasing. Can you imagine any funding agency in the world funding a project to replicate a slave community which is so much a part of the since-1492-culture of this country? Can you imagine any Black in this country who would work there? Or tolerate its existence? Can't you just see it in your mind's eye? There's old Uncle Remus telling stories about B'rer Rabbit to little gold and pink kiddies. There's Kunte Kinte tied to a whipping post and for a quarter you can whip him until he says his name is Toby? Or preach a sermon. There's Aunt Jemima selling cornbread and chitlins. Awful? Of course it is.

But there's a place in California where, for a price, you can see some variations of an "authentic" Indian dance, Indian artisans at work, a family in native costume in front of a native house. It's called Disneyland . . . and in Oklahoma, Florida, North Carolina, etc., there's an economic development project in the southwest where native artisans are taught to make hand tooled leather billfolds which say "I'm a Li'l Injun". For the tourists.

### **Conclusion:**

Tourism as economic development on Indian reservations just hasn't worked with two or three possible exceptions. And all the returns are not in on those. Tribes have been lured, just as developing nations were, into believing that their communities would be benefited by the income produced and the jobs created. The truth is that once a tribe starts on the path of tourism, they must pour more and more money in to try to save the initial investment. The initial dollars and the initial facility looks good — it's a monument to the tribal council that had the ingenuity to bring federal dollars to the tribe. But the dollars don't go to the tribe, they go through the tribe — to the contractors who are almost never Indian. The contractor's dollars go to suppliers and labor. Some of the labor may be Indian. Then the facility is sitting there with all the problems it brings with it. It must have police protection, roads, sewers, administration, etc. It brings an influx of non-tribal members with their accompanying jurisdiction problems and the garbage they leave to be picked up and disposed of. Then you find it isn't paying for itself — not even enough for the staff. The rationalization begins. If we only had a lake, a swimming pool, a museum, tennis courts, golf course, etc., more people would use the motel. More money is sought. More facilities are built. More dollars go through the tribe to outside developers. Chances are probably better than ninety to one that you still won't make money.

Our conclusion is that tribes considering tourism as economic development should clearly recognize that their chances of success of developing a business which not only pays for itself but provides some income for the tribe are poor to none.

If you still want to build those facilities, recognize that you only want the facilities for the facilities' sake and have a hidden agenda. Motels might become group homes for youth or homes for the elderly. Swimming pools, tennis courts, golf courses are nice to have for the use of tribal members. Museums are excellent for the retention of culture and education of the children. Do it. But expect to be looked at with a cold and fishy eye the next time you go to a funding agency with another great idea for economic development.

- <sup>1</sup> Cullinan, Terrence; *TOURISM IN LATIN AMERICA*. Stanford Research Report. 1971.
- <sup>2</sup> Grynbaum, Gayle; *TOURISM AND UNDERDEVELOPMENT*, North American Congress on Latin America Newsletter. (New York), (April, 1971)
- <sup>3</sup> Ibid
- <sup>4</sup> Ibid
- <sup>5</sup> Talbot, Steve; *THE MYTH OF INDIAN ECONOMIC AND POLITICAL INCOMPETENCE: THE SAN CARLOS CASE*. Southwest Economy and Society, Albuquerque, N.M. 1977
- <sup>6</sup> Ibid



## CHAPTER 9

### A VIOLATION OF TRUST: FEDERAL MANAGEMENT OF INDIAN FOREST LANDS

By Richard Nafziger

(Editor's note: This chapter was written as a "Red Paper" and distributed to tribes at our early seminars on Indian control of Indian resource development. Since that time, several tribes have made major progress in strengthening their tribal timber management programs. The Bureau of Indian Affairs is also making significant efforts toward improving their timber management operations. Nevertheless, the basic facts in this document remain the same.)

#### Economic Importance of Indian Timber

Indian forests are the largest private holding of forested land in the country. There are 200 forested or partially forested reservations in the country<sup>1</sup> totaling 13 million acres of forest land, 5.5 million acres of commercial forest and an estimated timber stand inventory of 47 billion board feet.<sup>2</sup>

For 57 Indian reservations this forestry resource is of major importance, contributing 25 to 100 percent of their total annual revenues from stumpage alone. Eleven reservations derive 80 percent of their revenues from timber stumpage and twenty three derive 60 percent.<sup>3</sup> Total tribal revenues in 1974 amounted to 73 million dollars<sup>4</sup> (see Table 1), again from stumpage alone. Add this to the fact that 25 percent of all tribal lands are forested and timber is a renewable resource we can clearly see that the effects of proper or improper management on the community can be quite significant.

In order to gain the greatest long-term economic benefits from timber it is necessary to:

(a) maximize the rate of return from the land by using sound silviculture methods and current economic management techniques; and,

(b) maximize the return from the forest capital (the tree) by utilizing this capital to create as much additional capital as possible, that is by participating in as many of the steps in the milling, processing, and retailing as is possible and insuring that the community benefits from consequent employment, training and feeder industries.

At this point it is clear that sound silviculture and management practices are not being carried out by the Federal government. This point will be elaborated on later in this chapter. It is also clear that tribes are not participating maximally in wood processing operations. Several tribes are operating sawmills and a few are involved in wood products industries but still 80 percent of the Indian timber harvested was purchased by non-Indian firms and individuals and was processed in processing plants owned by non-Indians. Additionally, "Non-Indians make up the majority of people who participate in the stabilized employment opportunities created by the management of Indian forests. In wages earned from the primary wood using industry alone, the total benefits for non-Indians is estimated at 20 million dollars per year. This is almost three times the amount of wages earned by Indians from the same source."<sup>6</sup> We can safely say that most of the income tribes derive is from stumpage and stumpage is the bottom dollar in the timber industry. Like most industries, the price timber companies pay for their raw products is minimal compared to the final dollar they get out of the finished product. According to William Duerr, in *Forestry Economics*, "In general, rates of return (from timber) are more comparable with those on more conservative bond issues."<sup>7</sup> Duerr goes on to explain that combining forest management with timber processing makes the investment more attractive. A colonial relationship can be seen here. Indian tribes own the resource of which the "Mother" country needs or wants for the benefit of its economy. The colony gets a fixed price for their timber but do not share to any great degree in the final profits from their timber even though they bear the full extent of the high risks associated with forestry management and owning forest capital.

Indian forests contribute significantly to the nation as a whole by supplying one and one-half percent of the nation's timber needs.<sup>8</sup> The importance of this timber will further be accentuated since the demand for timber is rapidly increasing and there is some concern as to whether or not timber supplies will be adequate in the future. A 1975 Forest Service report entitled *Assessment of the Nation's Renewable resources* states that demands for timber will increase twofold by the year 2020.<sup>9</sup> Indian timber will also provide the nation with indirect benefits such as watershed value to non-Indian downstream users of water. Indian timber provides improvement of fish and game habitat, preservation of recreation potential and in the extremely arid Southwest region, timber reservations provide some of the few areas in the region cool enough and lush enough for any recreational potential.

### Trust Responsibility and Indian Forests

The unique relationship existing between Native Americans and the Federal government has been analogized to that of a ward to his guardian (*Cherokee Nation v. Georgia*, 5 Pet. 1,16 (1831)). This is a trust relationship which was accepted by the Federal government when it made treaty agreements with Native Americans. It should be made clear that this responsibility is not a conveyance (or gift) to Indian people but rather an interest that has been retained by Indian people. The responsibility to manage Indian timberlands is not a public service but a legal obligation owed to Indian people for granting away title to huge areas of land which had been theirs; it is also a moral obligation owed to Indian people for the disruption of Indian trade and economic systems and the imposition of an alien system by force.

The resulting fiduciary duty imposes upon the Federal government as trustee, "the responsibility to administer the Indian forest resource with a high degree of care, diligence and skill commensurate with its ability or it will have to face possible recourse by Indian owners."<sup>10</sup> The American Law Institute "Restatement Trusts" Sec. 174 states, "The trustee (guardian) is under a duty to the beneficiary (ward) in administering the trust to exercise such care and skill as a man of ordinary prudence would exercise in dealing with his own property; and if the trustee has greater skill — (here engineers, hydrologists, soil scientists, *contract negotiators* (Note — something the BIA has not only not done but also something it has never thought of), administrators, lawyers) than that of a man of ordinary prudence, he is under a duty to exercise such skill as he has."<sup>11</sup> In the Menominee timber blow-down case<sup>12</sup> the court determined that Indian timber operations are to be managed as commercial or industrial enterprise and that the U.S. has an obligation to prudently manage Indian forest land and connected enterprises in a manner consistent with accepted professional standards of silviculture and business techniques. In that court decision Congress, along with declaring that the Federal government could be sued for

uch mismanagement, also declared that proper management is the law. The BIA, the Economic Development Administration (EDA), and the USDA Forest Service cannot argue that it is not their fault that timber stands, mill and enterprises are neglected and improperly managed, it is their responsibility to see that they are properly managed or to compensate the tribes for their failure to do so.

### Management Responsibilities

In carrying out its trust responsibility toward Indian people's forest lands, Congress enacted the general forest regulations U.S.C. 25, Part 141, and the following objectives were set:

- (1) The preservation of such lands in a perpetually productive state by providing effective protection, by applying sound silvicultural and economic principles to the harvesting of the timber and by making adequate provision for new forest growth as the timber is removed.
- (2) The regulation of the cut in a manner which will insure method and order in harvesting the tree capital, so as to make possible continuous production and a perpetual forest business.
- (3) The development of Indian forests by the Indian people for the purpose of promoting self-sustaining communities, to the end that the Indians may receive from their own property not only the stumpage value, but also the benefit of whatever profit it is capable of yielding and whatever labor the Indians are qualified to perform.
- (4) The sale of Indian timber in open competitive markets in accordance with good business practices on reservations where the volume that should be harvested annually is in excess of that which is being developed by the Indians.
- (5) The preservation of the forest in its natural state wherever it is considered, and the authorized Indian representatives agree, that the recreational or aesthetic value of the forest to the Indians exceeds its value for the production of forest products.
- (6) The management of the forest in such a manner so as to retain its beneficial effects in regulating water run-off and minimizing erosion.
- (7) The preservation and development of grazing, wildlife, and other values of the forest to the extent that such action is in the best interest of the Indians.
  - (a) Similar objectives are sought in the management of allotted Indian forest lands, but, in addition, the sales of timber shall be based upon a consideration of the needs and best interests of the Indian owner and his heirs. The Secretary shall take into consideration, among other things:
    - (1. The state of growth of the timber and the need for maintaining the productive capacity of the land for the benefit of the owner and his heirs.
    - (2. The highest and best use of the land, including the advisability of devoting it to other uses for the benefit of the owner and his heirs.
    - (3. The present and future financial needs of the owner and his heirs.

In meeting these objectives, the Bureau is responsible for carrying out the following activities:<sup>13</sup>

#### A. *Forest Management Activities as Authorized by Congress*

##### 1. *Timber Inventory*

The Forestry organization operating under existing laws and departmental regulations, carries on continuous examinations of reservation forests to:

- a. Classify and map the forests into commercial, non-commercial, reserve and special-use areas; and to identify land ownerships as tribal, trust allotted, and non-Indian forest lands.

- b. Delineate the forest into timber types, species, age classes and virgin or cut-over stands.
- c. Determine the condition of the stands for maturity, mortality, stocking, planting and seeding needs, insect and disease prevalence, and fire hazards.
- d. Inventory the forest types for timber volumes.
- e. Identify and evaluate areas significant for watershed, stream flow, recreation and other values.

## 2. *Growth Studies*

The Forestry organization measures the growth of the Indian forests, both gross and net, to calculate the permissive harvest under sustained-yield principles. This harvest is normally referred to as the "allowable cut."

## 3. *Management Plans*

Based on the data collected, the Forestry organization prepared long-range, forest management plans, with calculations of annual allowable cuts, developmental programs, harvest progression, special treatment areas, and potentials for improvement. The Bureau submits and explains these plans to tribal leaders and discusses procedures or adjustments necessary to meet the wishes and objectives of the tribes.

## 4. *Timber Sales*

On reservations where the volume of timber available for cutting exceeds that being used by the Indians themselves, open market sales are authorized by regulation, provided consent is given by the tribe for tribal timber, or by owners of timber held in trust on allotted lands.

### a. **Sale Procedures**

Most sales of Indian timber are made under timber cutting contracts which are publicly advertised. The sales may be made either at public auction, by sealed bids, or a combination of both. The advertisement may limit sales to members of the tribe, or may grant tribal members the right to meet the higher non-Indian bid. The Tribal Council on each reservation determines if such Indian preference is to be permitted. Contract sales may be made without advertising to provide a right-of-way or prevent undue waste. Sales for less than \$500 in stumpage value may be executed without advertising.

### b. **Bureau Participation**

The Forestry organization normally participates in sales of Indian timber through the following operations:

- (1) Selection of the specific sale area, delineation of sale boundaries, location of roads, and cruises of volume and quality of timber to be designated for cuttings.
- (2) Preparation of detailed forest officers' reports, including appraisal of timber stumpage for presentation to and approval of Indian owners.
- (3) Preparation of sale prospectuses, publication of advertisements, acceptance of bids, selection of purchaser, and execution of contracts.
- (4) Supervision and administration of sale contracts, including but not limited to, marking and scaling of timber, checking of property lines, practices of logging, accountability of logs, disposal of brush, and protection of streams.
- (5) Assistance with collection of payments from purchaser and distribution of stumpage returns to tribe, allottees, or Federal Treasury.
- (6) Periodically reappraising stumpage prices under long term contracts in order to update obsolete data and provide realistic payment for timber sold.

### c. **Purchasers Obligations**

The primary obligations of the purchasers of Indian timber are to cut and remove the timber, and to pay the purchase price as stipulated in the contracts. Purchasers may also be required by contract to build their own logging roads, to observe safety measures to avoid fires, to post fire lookouts, to replant the logged-over area, and/or to clean up slash and other debris at the end of logging operations. Operators are also required to maintain fire control equipment equal to specified minimum standards. In some instances, timber sales

contracts have required the purchasers to construct and operate wood utilization facilities on or near reservations in order to provide more local job opportunities for Indian people.

#### 5. Forest Protection

The Forestry organization is responsible for protecting Indian forest lands in the following respects:

##### a. Fire

- (1) Preparing detailed wildfire action plans.
- (2) Developing active educational programs in fire prevention.
- (3) Planning and conducting annual fire-training programs.
- (4) Negotiating cooperative fire protection agreements with other forest protection agencies.

#### Adequacy of Federal Management of Indian Forests

*Reports indicate that the Federal government is not performing its function as well as it could and is negligent in many cases. A 1973 GAO study reports that: "The Bureau of Indian Affairs does not have adequate assurance that Indian forests are adequately protected and properly developed as required by law. In several areas of forestry management, Bureau field personnel are making important decisions without adequate criteria, guidelines or sufficient information."*<sup>14</sup>

The report stated that the Bureau does not adequately:

- determine annual harvest volumes;
- update timber management plans to accurately reflect annual accomplishments in the areas of reforestation and timber stand improvement;
- identify timber management plans to accurately reflect annual accomplishments in the areas of reforestation and timber stand improvement;
- identify and establish priorities for those areas that need reforestation and timber stand improvement;
- obtain advice of appropriate resource specialists as to minimize the impact of timber harvesting and road construction on other forest resource; and,
- increase the harvest volume of dead and dying timber.

Lack of inventories and plans is unheard of in the corporate timber world and has led to miscalculations which have cost tribes millions of dollars. The Coeur d' Alene tribe stated in a report to Congress (1976) "The BIA does not have a forest management plan and cannot insure the sustained cut of timber for the future. Their cutting cycle is based on incomplete and outdated information, making it impossible for Bureau foresters to determine if our forest is being over or under cut. Without a management plan, our forests are only growing at half of their potential, thus producing only half the income that could be derived. In addition, forest information is needed by the tribe to plan for its logging enterprise which provide employment to tribal members, generates additional income to the tribe and allows the development of tribal resource by tribal members."<sup>15</sup>

Inadequate protection of Indian forests has caused uncalculated losses to Indian owners. Former Chief Forester Wilcox stated before the Senate Appropriations Committee in 1974, that in the area of prevention and presupposition, "We (BIA) have been much weaker in these latter activities than either the Forest Service or BLM."<sup>16</sup> Wilcox in an earlier intra-agency memo stated "Indian forest lands are managed less intensely than the government manages its own national forest properties and compares even more poorly with the management of industrial tree farms." He added, "The question might well be asked 'Should a trustee manager treat a property less intensively than he does his own forest land?'"<sup>17</sup>

A 1975 GAO report the Senate Interior Committee (unreleased) reiterating the same point in a 1973 report, as well as others, concluded that the Bureau has not adequately:

- increased the volume of timber harvested to the level permitted under the principles of sustained yield,

- improved the effectiveness of pre-commercial thinning;
- harvested adequate levels of dead and dying timber;
- performed commercial thinning;
- established specific goals and action plans for identifying and accomplishing needed forest management work;
- improved the effectiveness of reforestation programs; and,
- made substantial effort to acquire the personnel and funds needed to fully manage the Indian forest.<sup>18</sup>

To make sure that a sustained yield (defined as the same amount of timber that becomes mature every year, is harvested every year) of timber on Indian lands is reached, the Bureau sets an allowable cut (defined as the volume of timber that can be cut every year). The minimum potential yield for a forest in terms of economics is achieving the allowable cut; if the cut is not reached it is considered a dollar loss. Chief Forester Stevens, in his 1975 Forestry Report, stated that in the past five years of cutting on all forested reservations, the Annual Allowable Cut (AAC) has not been attained in eight out of ten area offices. The estimated dollar loss for the calendar years 1970-1974 is \$27,030,472.<sup>19</sup>

**COMPARISON OF ANNUAL ALLOWABLE CUT DEFICIENCIES AND LOSS OF INCOME FOR CALENDAR YEARS 1970-1974**  
(Table 2)

AREA	AAC PAST 5 YRS.	ACTUAL CUT	PERCENT DEFICIENT	ESTIMATED DOLLAR LOSS
Aberdeen	3.9	MMFBM 1.1	71.8	\$ 25,400
Albuquerque	207.4	161.5	21.7	2,353,554
Billings	486.4	374.1	23.1	2,249,000
Eastern	59.5	30.8	48.2	1,703,931
Juneau	62.5	60.7	2.9	0
Minneapolis	730.0	219.2	68.6	4,413,600
Navajo	223.0	217.5	2.5	259,501
Phoenix	507.5	353.9	30.3	3,584,000
Portland	2,743.0	2,547.4	7.1	12,441,486
Sacramento	200.0	200.0	0.0	0
<b>TOTALS</b>	<b>5,223.2</b>	<b>4,165.8</b>	<b>20.2</b>	<b>\$27,030,472</b>

The 1975 GAO report looked at this problem on three reservations — Yakima, Colville, and Fort Apache (Arizona). On these reservations, there was an estimated dollar loss for calendar years 1969-1973 of \$1,721,739.<sup>20</sup> On the 12 major timber reservations, at least 110 MBF of harvestable timber is left in the forests each year, accounting for a dollar loss of \$5,414,897. This is a loss of income for the tribes and a loss of timber for the country.

Yakima, for example, has a listed AAC of 186 MBF for the year of 1974. However, only 127 MBF of timber was harvested. At Colville, the AAC is listed at 120 MBF AAC and in 1974 121 MBF was cut. The GAO report stated that recent timber inventory and new allowable forest harvest computations indicate that the AAC should be increased from 16 MBF to 136 MBF. This could be true of other reservations where AAC listings are much lower than they should be, indicating that dollar losses could be higher.

The failure to meet the annual allowable cut means more than a temporary loss of revenue. Rather, it increases the risk of damage destruction due to fire, insects or wind. Trees also can become over-mature thus less valuable and in the case of some species, worthless. Leaving mature trees in the forest does not mean stored capital.

Pre-commercial thinning (defined as the thinning of trees that are of no value or to make room for

productive growing trees) and reforestation is also not being adequately performed on Indian forest lands. The report stated that engaging in these practices would result in additional timber, thus raising the AAC to a higher level.

In 1973, "thinning accomplishments for all reservations equaled only about 3 percent of the total amount of pre-commercial thinning needed (backlog) and the reforestation accomplished equaled only about 4 percent of reforestation needs."<sup>21</sup> GAO blamed the lack of reforestation and thinning on insufficient inventory data and lack of plans and goals. Reports estimating the backlog are based on personal observations and experiences rather than objective inventories. The backlog figures are also outdated by many years.

Indian forests are overstocked with young trees that could be sold and processed into wood products. This kind of thinning not only leads to increased future AAC's, but also revenue from harvesting and selling the young trees that would be thinned. GAO reported "on the three reservations we visited, the Bureau has not determined the extent of commercial thinning opportunities, nor has the Bureau developed plans and goals for performing commercial thinning. On Yakima, an insect epidemic near the end of the last century destroyed much of the original timber stand and now dense, overstocked, stagnated stands of pole and sawtimber sized trees cover most of the area. No commercial thinning has been done and none is planned."<sup>22</sup>

In order to assess the value of doing commercial thinning, the GAO examined the results of a private timber company who performs this function: "The company representatives said that about 2,000 acres of its land is commercially thinned each year and a portable small log sawmill has been built to process the logs. In addition to increasing timber growth from the thinning, the *company is making a profit from operating the small log sawmill.*"

The Bureau again fails to perform a similar function in not harvesting dead and dying timber: "On the Colville Reservation, 47 MBF, which is equal to 39 percent of the AAC harvest, dies annually and on Yakima, 2 million MBF dies annually. The Bureau has no program for systematically harvesting this timber, and therefore, a large volume is not harvested and deteriorates to the point where it can no longer be used."<sup>23</sup>

An overstocked forest due to lack of thinning and not meeting allowable cuts amounts to overcrowded forests with resulting loss of growing space, decreased soil nutrients etc. thus creating smaller trees or a loss of total MBF for a forest. It also creates damaged trees which grow in unfit manners for most wood processing operations. By not performing thinning and cutting tasks at proper times, all the timber in the forest, present and future is affected.

Another problem brought out by the GAO study was that the Bureau lacks the necessary staff to perform required forest management functions; according to a Portland area analysis of their staff needs, "Additional Bureau staff would annually cost about \$300,000 but would provide an increase in timber income to the Indian owners of 4.2 million dollars." A field study proves their point — Wenatchee National Forest has an AAC of 177 MBF; neighboring Yakima has an AAC of 186 MBF; Wenatchee has a staff of 104 employees and Yakima a staff of 13. "With a large forestry staff, the Wenatchee National Forest has been able to harvest a larger volume of timber and has accomplished more intensive forest management work which increases the volume of timber available for future harvesting."<sup>24</sup>

	Wenatchee National Forest	Yakima Reservation
Average annual timber harvest, (1969-1973)	180 million board feet	144 million board feet
Pre-commercial thinning (5-year average)	1,615 acres per year	1,720 acres per year
Reforestation (5-year average)	2,757 acres per year	138 acres per year
Commercial thinning	2 sales in progress 4.2 million board feet	None

Chief Forester Stevens pointed out, "Forestry personnel total 325 for the entire Bureau operations. We note there are more personnel (358) in the Medford and Salem Districts (Oregon) of the Bureau of Land Management working in forestry than there are in the entire BIA forest program and with a lesser annual allowable cut (BLM 518 MMFBM; BIA 1,044 MMFBM)."<sup>25</sup>

The basic posit of Forestry Economics is that the capital the forest capital is also the timber growing machine, or, the factory is also the product. Production is dependent upon maximum management of cutting schedules, thinning, etc., or managing the trees' growth. Failure to manage properly by undercutting, lack of thinning and reforestation not only means an inefficient factory but also permanent damage to the factory itself and future reduction of its production capabilities.

### Costs of Management

Trust responsibility costs for managing Indian forests are paid by the Federal government through appropriations, and by Indian timber owners through the Federal government's collection of administrative fees from Indian timber sales receipts. These administrative fees are deductions from the gross proceeds of timber sales made by the Federal government in order to cover in whole or in part the cost of management and protection of forest lands. The authorization for timber fees was provided by the Act of February 14, 1920, 41 Stat. 415, U.S.C. 25: 141.18 as amended by the Act of March 1, 1933, 47 Stat. 1417, 25 U.S.C. 141.18, which states, "Deduction for Administrative Expenses,:

"In sales of timber from either allotted or unallotted lands, a reasonable deduction shall be made from the gross proceeds to cover in whole or in part the cost of managing and protecting the forest lands including the cost of timber sales administration but not including costs that are paid from funds appropriated specifically for fire suppression or forest pest control. Unless special instructions have been given by the Secretary as to the amount of the deduction or the manner in which it is to be made, there shall be deducted 10% of the gross amount received for timber sold under regular supervision and 5% when the timber sold in such a manner that little administrative expenses by the Indian Bureau is required. Service fees in lieu of administrative deductions shall be determined in a similar manner."<sup>26</sup>

This regulation was interpreted, until 1972, to mean that up to 10% (usually 10%) of all gross timber sale revenues would return to the U.S. Treasury as a charge *for service performed* in managing Indian timber. In fiscal years 1963-1967, approximately \$5,000,000 was returned to the Treasury.

Former Chief Forester Wilcox, in his 1970 memo, "Use of Administrative Fees for Intensifying Management of Indian Forests," argued that Indian Forest lands are grossly underfunded in comparison to private or Federal forest lands. He maintained that one way to increase funding would be to invest the timber sale fee into intensive development of Indian forest lands, thus putting the money to immediate and meaningful use in local Indian communities. Mr. Wilcox used the special tax breaks given to private timber companies (capital gains tax breaks) as an analogy to the administrative fees. Since Indian tribes lack a tax base from which it would be possible to encourage good forestry practice for Indian owners, the Federal government could forego revenue by not collecting the 10 percent of gross timber sales receipts for the Treasury. This would be possible if the tribes contributed an amount equal to the 10 percent of gross timber sales receipts towards paying the cost of the forestry program on their reservation.<sup>27</sup>

In this light, the timber fees can be seen as a tax, and the provision for reinvestment can be viewed as the equivalent of a capital gains tax break.

On June 15, 1972, Harrison Leach, Assistant Secretary of Public Land, issued a memo on the subject of "Amendment to Special Instruction for Deduction for Timber Sales Administrative Expenses."

"When Indian tribes contribute toward paying the cost of the forestry program on their respective reservations by authorizing expenditures from their existing tribal accounts, the amount of the administrative fee deduction that is to be collected from receipts from the sale of such tribal timber that is paid for, cut and scaled during the fiscal year in which such expenditures from such tribal accounts are made, shall be determined by reducing the administrative fee deduction that would otherwise be collectable under these instructions in the absence of any tribal contribution by the actual amount of the tribal contribution."<sup>28</sup>

A basic problem resulted in the requirement that the funds be obligated in the same year that timber sales receipts were ended. Consequently, some tribes had failed to obligate the full 10% of timber sales receipts and the timber fee money was returned to the Treasury. (In 1974 nearly one million dollars of Indian money was returned to the Federal treasury.)<sup>29</sup>

The 1975 GAO report criticized this practice and recommended that the BIA set up a task force to investigate the problem.<sup>30</sup> The task force recommended that the tribes be allowed a longer period in which to obligate the fee money. The task force recommendation has recently been implemented; now tribes are given two years to plan for the use of funds. The money lost by tribes because they were not provided with adequate funds, and the time and technical assistance, to obligate the timber fee money, is out of the hands of Indian people for good, (unless they can get it back through litigation.)

The wisdom of collecting timber fees from tribes for any purpose should earnestly be questioned. Former Chief Forester Wilcox clearly pointed this out, "*Any dilution in the total income received by Indian people from stumpage or contribution of tribal funds to finance the forestry program aggravates the economic distress of the community and furthers the need for Federal funds to offset such distress. One must therefore seriously question the wisdom of withdrawing funds from economically distressed communities either through payment of either administrative fees or through budgeting tribal funds, while at the same time contributing large amounts from Federal funds (other than those appropriated for forestry) to stimulate the economies of the same communities. Such fiscal manipulation contributes toward the burgeoning dominance of Federal government over government of the local Indian communities.*"<sup>31</sup>

Many tribes maintain that the Federal government should not be deducting administrative costs from stumpage returns because all forestry functions are a trust responsibility and should be Federally funded.

Mr. Wilcox also pointed out that such a tax as the *administrative fees are not charged for carrying out trust responsibilities for other Indian resources*. Fees are not charged for mineral, water, business assistance, fishery, or farming assistance. "To establish the proper perspective for judging the equitability of (charging) administrative fees it must be recognized that the authorizing act does not confine such charges to forestry management alone. The lack of consistency in the manner in which this authorization has been exercised has resulted in inequities in the methods for funding of various services provided to Indian people. Accordingly, the Indians have resented the 10% fee for forestry services and have responded with an understandable reluctance when requested to pay for an ever-increasing part of those services. They question the reason for paying for forestry when most other government services are provided with little or no such payment."<sup>32</sup> The fee in reality is a carry-over from Forest Service practices which many Bureau practices mimic.

*The Federal government has failed to adequately utilize fees collected from timber sales.* According to Chief Forester Stevens, "The Secretarial order in 1972 returning administrative deductions to tribes has created a management control situation that has yet to be resolved. The past three years has seen an estimated 500% increase in funding by tribal governments. This funding amounts to 40% of the total Bureau forestry program for the past three years. There was no corresponding increase in Federal positions to either monitor, coordinate, or effectively control this increase."<sup>33</sup>

*The Federal Government has used Indian money collected from timber fees to finance the worst major timber program in the country. Until recently, Indian people have been denied the technical knowledge of timber management necessary to manage their own forestry resources. Due to the deficiency of forestry and forestry management skills and lack of capital, Indian people have been forced to rely on the Federal government to carry out these functions. This reliance has been both expected and encouraged. The U.S. Government has failed to properly manage the forests for them, and because of this, Indian people have suffered great economic harm. Only with the advent of Indian people educating themselves on forestry management has any real accountability been demanded of the Federal government. Now Indian people are taking the Government to court. The Menominee Tribe has won litigation suits for mismanagement, and their situation is by no means unique. Currently, the Klamath Tribe, the Quinault Allottees, Hoopa Valley and Menominee are involved in mismanagement litigation with the Federal government. The facts seem to bear out that the Federal government owes Indian tribes millions of dollars for failing to carry out fiduciary duties. It is clear that the government has no business collecting badly needed revenues from tribes whose economic situation has been caused by Federal disruption of Indian economy and Federal failure to adequately carry out trust responsibilities.*

*Total expenditures for the Indian forestry programs are meager in comparison with the Government's participation in the intensive management of large private timber companies for which it has no trust responsibility. The only valid argument for taking the 10% fees is that it provides additional revenue for forestry development. The Federal Government, however, gives away tax breaks to the eight major timber companies at an amount of 134 million dollars per year. Weyerhaeuser, the second largest private timber owner, received 50 million dollars in tax breaks in 1975.<sup>34</sup> According to former Treasury Department Assistant Secretary, Stanley S. Surrey, "the effect of giving specific taxpayers a great — and foregoing revenue — is the same as providing direct Federal expenditures."<sup>35</sup> Emil Sunley, former Treasury Department Tax Analyst, stated in a paper prepared for the Society of American Foresters Convention in 1975, that "When it comes to subsidizing timber, the Treasury Department runs a larger program through the tax system than the direct programs administered by the Department of Agriculture, Interior, and Transportation."<sup>36</sup>*

These capital gains tax breaks represent contributions of the Federal government to encourage intensified forestry management on private forest lands. Such participation offsets the negative effects on forest management which results from the long term nature of investments in forestry. It may well be asked why the trustee provides these huge financial benefits to large companies and not to Indian tribes for which they have a direct responsibility. The Federal government is concerned with escalating timber production and is willing to give timber companies incentive to produce more timber but it is unwilling to provide adequate allocations for Indian forestry land management in order to increase allowable cut or even meet the present allowable cut. In analyzing this problem, Mr. Wilcox argued "It seems obvious that the government, as trustee manager of the Indian forest properties, should be willing to extend the same degree of encouragement for good forestry on Indian trust properties that it has been willing to extend to the private land owner. Without a tax base from which it would be possible encourage such management through tax concessions, it appears that the only available alternative is through direct appropriation from Federal funds. *Such appropriations should be of a magnitude commensurate with the Government's participation through tax concessions in the management of other private forest lands.*"<sup>37</sup>

In some cases the collection of the fees for use in timber stand development is economically absurd. Indian timber stands in arid areas grow very slowly, thus the management of these stands for future growth and harvesting is totally uncompetitive with more moist Northwest and Southern timber regions. The amount invested in improving stands is hardly returned. The tree as a factory is totally inefficient. That is not to say one cannot harvest the timber that is already there; rather, it is economically unsound to manage the forest for future growth. This means that the timber revenues could reap a higher rate of return if they were used in a different economic development capacity which has a higher rate of return.

A corresponding argument is that for all timber stands in some years, the revenue generated from timber sales could produce more income in other economic development areas. The requirement that these fees be used

in certain areas creates a great amount of inflexibility in economic planning.

It should be understood that technically tribes can receive the entire 10% for their designated use in timber management. Some tribes have been reluctant to push for a policy that the fee collection and subsequent earmarking for timber management be dropped and the 10% fee be included as an unearmarked amount in general revenue. Their reasoning is that internal politics could result in the money being diverted away from timber management into other areas. This is, indeed, a possibility. However, if tribes want to control the development of their own resources, those problems should be handled internally and not externally.

### Conclusion

The Federal government's failure to participate equitably, and adequately, in the management of Indian forests is economically, legally and morally irresponsible. Economically, the timber supply and related benefits are diminished for the Nation as a whole and the subsequent loss of revenue for Indian people will necessitate further government spending through other programs. Legally, inequitable participation and inadequate participation is a violation of trust responsibility. Morally, it is wrong for a wealthy trustee to withhold from an economically deprived trustor the management and financial assistance that it provides to those of which it has no trust responsibility; especially, a trustor whose economic deprivations was created by the trustee.

## A PROPOSAL FOR CHANGE

The responsibility to manage Indian timber lies within the Federal government, according to mandates of Congress. Different from other Federal programs, policies or agencies, the management must be guided by the trust responsibility to which the Federal government has obligated itself to tribes.

Underlying the Federal failure to properly manage tribal forests lie two basic problems: (1) There is little tribal control of the programs, and (2) the program is operated as a Federal program rather than as a business. Indian people have little input or impact on the branches of government which make the decisions and policies on their forests. They have no direct line of control over the management.

The Forest Service serves as a model for the management program. Unfortunately, its entire design and purpose is totally different. Management of Federal forests is not intended to be a profit-making venture. Additionally, the Bureau program has too many burdensome channels for decision making to serve the purpose of making money.

One alternative which has been suggested is for tribes to individually contract their timber programs through the provision of the Indian Self-Determination Act. This could work for tribes who have well-trained management and adequate timber assets to develop feeder industries to be competitive in the timber industry. Individually, tribes probably cannot compete with the lumber barons.<sup>38</sup>

Another alternative which has been proposed would be the formation of an Indian Inter-Tribal Timber Cooperative.<sup>39</sup> The cooperative membership would consist of all tribal timber owners or tribes involved in wood processing enterprises. It could serve several functions.

A. Monitoring government timber management programs and acting as an *advocate* for Indian timber owning tribes by influencing Federal policies and management practices.

B. As a *clearing house* for information on timber companies, prices, contracts and marketing.

C. As a *holding company*, to which tribes could "sell" their timber at a minimum or agreed upon market value price. The co-op would sell when the price is high and stockpile otherwise. At the end of the year, dividends could be paid based on the original value compared to the finally sold at value or by any method selected by a board of directors made up of tribal members. The cooperative could obtain funds by contracting out of the portion of the Bureau funding now used to administer timber sales.

D. As a *marketing organization*: hiring top-notch expertise in national and international marketing could assist in locating sales outlets or in assisting tribes who want to go into timber products utilization; it could help them determine what kind of wood products to manufacture by monitoring market needs and could help find markets for wood products industries that already exist.

E. As a *pool for technical and managerial expertise*. The cooperative would be able to hire experts in various fields of forestry economics and management and would maintain communication with other consultants on a regular basis.

The cooperative could increase the power of each individual member by providing functions which most would not be able to do on their own and by multiplying the political and economic effect each tribe would have on the timber industry and Federal policy. Essential to the success of the program would be an increase of funding for the forestry program. Presently, appropriations are inadequate to even minimally fund the program that exists now. Trust responsibility would in no way be changed since the Federal government still must assure that Indian rights are protected and are responsible to see that the program does not fail.

The cooperative could have the option in the future of setting up an Indian timber bank. The bank could provide loans to tribes to help set up timber enterprises and operate management systems. At the same time it would provide any needed technical assistance and marketing and holding services. The bank could start in a way similar to the Farmers' Credit Administration (FCA), which originally was a government program but after a period of time became totally self-sustaining.

Many variations of cooperatives ideas are being considered by many different tribes and groups. This is only one of those being considered.

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CHAPTER 10  
FISH STORIES: THE ONES THAT DIDN'T GET AWAY

By Kathryn Kyle

**FISHING RIGHTS**

Treaty Indian fishing rights are private property rights within the meaning of the Fifth Amendment. They are rights which were retained by the tribes as separate governments co-equal with the United States, at the time treaties between the U.S. and the various tribes were signed: they are not privileges granted to Indians by the U.S. Treaties are grants of land and rights *to* the U.S. *from* the Indian tribes and not vice versa. All those rights not expressly granted to the U.S. were reserved by the Indian tribes.

Nearly all Indian treaties in the Pacific Northwest, where the right to fish has been recognized in federal courts as "not much less necessary to the existence of the Indians than the atmosphere they breathed,"<sup>1</sup> specifically state that:

The right of taking fish at all usual and accustomed grounds and stations is further secured to said Indians in common with all citizens of the Territory, and of erecting temporary houses for the purpose of curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle on unclaimed land.

Even though treaty Indian fishing rights exist without an express statement of their reservation in the treaty, in the Pacific Northwest, the area of greatest controversy is over Indian fishing rights. These rights are doubly guaranteed by their specific reservation in the treaties.

Opponents of off-reservation Indian fishing and the Boldt decision in *U.S. v. Washington* (1974), including state fish and game commissions, argue that the phrase "in common with all citizens of the Territory" means that Indians have an equal right with all other U.S. citizens in the fishery resource and are therefore subject to the same regulations as all other U.S. citizens. This argument ignores a fact which has been recognized and reiterated in numerous federal cases — that Indians owned property and rights, including the right to fish, and that such property and rights not granted away from the tribes were retained, again including the right to fish. The natures

of non-Indian fishing and of Indian fishing are therefore essentially different from one another. The Indian fisherman has a *right* to fish because his tribe, as a separate political entity recognized as co-equal with U.S. government, has a treaty with the U.S. which reserves that right. The non-Indian fisherman, on the other hand, has no right to fish. He has a fishing *privilege* which can be granted or withheld by the state, since fishing rights given up by Indians at the time of treaty signing are held by the state and not by individual non-Indians. Non-Indian claims to the fishing rights, because of their character of private property rights, must be compensated for if taken or destroyed.

The Boldt decision in the case of *U.S. v. Washington* (1974) is the most recent development in the endless dispute over the extent of Indian fishing rights and the regulation of Indian fisheries. The major provisions of the Boldt decision are as follows:

1. State Regulation. The state has power to regulate off-reservation fishing only "to the extent reasonable and necessary for conservation of the resource." (It should be noted before going any further that on-reservation Indian fishing is no longer a matter of dispute. State and federal regulation of Indian on-reservation fishing is not permissible, nor is a state or federal tax on on-reservation Indian fishing enforceable. Tribes have complete jurisdiction over the fishing activities of their members on the reservation.) The state cannot discriminate against Indians for conservation purposes, and is obligated to find the least restrictive measures for regulating Indian fishing for conservation purposes. Conservation regulations affecting Indians must be published separately from generally applicable fishing regulations and the state bears the burden of proving that regulations meet the above standards.

2. Allocation of Fish. Fish taken on the reservation and fish taken off the reservation at usual and accustomed places for personal subsistence and religious ceremonies are not included in the allocation to be made in concordance with the clause "in common with other citizens of the Territory," as rights to these fish were reserved exclusively for treaty Indians. Fish which do not fall into either of the above two categories are to be shared equally by Indian and non-Indian fisherman at off-reservation sites. That is, each party, Indian and non-Indian, is entitled to the opportunity to take 50% of the harvestable catch that would normally reach off-reservation Indian fishing places. This includes fish that would reach usual Indian fishing grounds if they hadn't previously been caught at sites located ahead of Indian fishing areas on inland marine waters and in the ocean fishery.

Because treaties between the U.S. and Indian tribes were entered into "on the basis of formal equality, the state shares its rights in those fisheries with another party."<sup>2</sup> "An attempt to partition equitably rights which these parties were to hold in common must reflect this initial equality."<sup>3</sup> The state:

may not force treaty Indians to yield their own protected interests in order to promote the welfare of the State's other citizens.

The Indian tribes reserved a right to take fish. The State, in allowing non-Indians to fish, cannot act to diminish that right. It must curtail non-Indian fishing which interferes with that right.<sup>4</sup>

In view of the fact that the fishing resource is to be shared equally among two parties, the state and the treaty tribes, the Boldt decision encourages state and tribes to share management of the resource and regulation of its harvest. The third major provision of the decision is for tribal regulation of the Indian fisheries. The decision rules that:

where a tribe demonstrates to the satisfaction of the Court that it is able and willing to self-regulate in a manner that will protect the fish runs, then further state regulation is not necessary and may not be exercised except where the state first applies to the court for an order allowing the regulation and such regulation is necessary for the perpetuation of the run.<sup>5</sup>

In order to become self-regulating, a tribe must meet the following qualification and conditions:

#### Qualifications

1. Competent and responsible leadership.
2. Well-organized tribal government competent to adopt and apply proper regulations.
3. Indian personnel trained and competent to enforce the regulations.
4. Readily available fisheries experts to advise on regulation.
5. Officially approved membership roll.
6. Membership certification and appropriate I.D. cards with photograph.

#### Conditions

- A. Adopt full and complete tribal fishing regulations, including reasonable and necessary conservation restrictions, after consultation with state agencies.
- B. Permit state monitoring of off-reservation Indian fishing.
- C. Provide on and off-reservation catch reports to the state.<sup>5,4</sup>

At the time of the decision Judge Boldt found the Yakima and Quinault tribes qualified for self-regulation. In 1976 the Swinomish, Upper-Skagit, and Sauk-Suiattle tribes formed the Skagit Systems Cooperative, a fisheries management co-op. They have hired a fisheries biologist, two fisheries technicians, a part-time accountant, a court administrator, and an enforcement staff of nine to take care of the management needs of all three tribes. Further, the three tribes have established an allocation formula for the harvest based upon the number of fishermen in each tribe.

In summary, the rights of Indian treaty fishermen as established by the Boldt decision are as follows:

- 1) exclusive right to fish on the reservation without any state regulation; 2) right to take fish from all usual and accustomed off reservation sites necessary for personal subsistence and ceremonial purposes, subject only to state regulation deemed necessary for conservation; 3) right to 50% of the rest of the fish from all usual and accustomed off reservation sites; and 4) right to an equitable adjustment in number of fish allowed to be taken at usual and accustomed off reservations sites because of disproportionate amount which is taken by non-Indian fishermen at adjacent areas which prevents fish from entering off reservation sites of the treaty Indians. As far as off reservation waters which are not usual and accustomed places for Indian fishing are concerned, Indian citizens are accorded the same privileges — and subject to the same regulations — as non-Indian fishermen.<sup>6</sup>

Far from being conclusive, the Boldt decision has ignited further controversy over state regulation of off-reservation Indian fishing and allocation of the fish harvest, to the point where certain interest groups have gone so far as to urge abrogation of treaties by Congress or Congressional purchase of Indian fishing rights.

Opponents of the Boldt decision claim that it is racist and discriminatory: C. Herb Williams in *The Salmon, the Indians and the Boldt decision* declares that:

The Boldt decision continues to set Indians apart from the rest of the United States, treating them, in effect, as second class citizens. All other fishermen must stand aside, according to the Boldt decision, to be sure that Indians get their share. It implies that Indians are inferior and cannot compete.<sup>7</sup>

This statement is clearly an interpretation of the decision which perverts its implications in order to serve the author's own purpose. The Boldt decision in no way implies that Indians are inferior, second-class citizens. Rather, it recognizes the fact that Indians have been prevented by the state from exercising their rights both as citizens of the U.S. and as parties to a treaty with the U.S. government. Judge Burns, one of three U.S. Court of Appeals Judges who unanimously found the Boldt decision correct in all aspects stated that:

The record in this case makes it crystal clear that it has been the recalcitrance of Washington State officials (and their non-Indian commercial and sports fishing allies) which produced the denial of Indian rights . . . This responsibility should neither escape notice nor be forgotten.<sup>8</sup>

It is hard to understand the logic behind Mr. Williams assertion that the Boldt decision, which mandates a 50-50 sharing of fishery resources between Indians and non-Indians at all customary Indian off-reservation fishing sites, clearly a ruling that embodies the principle of equal opportunity, is discriminatory. Mr. Williams first asserts that the Boldt decision treats Indians as second-class citizens, then he complains paradoxically that it is another in a long line of court decisions which treats them as "super citizens":

Indians are being given special privileges, being set apart on the basis of race, tribal membership and in some instances, religion. One federal judge said that Indians today are becoming 'Super Citizens' because they have these special rights, plus all the other rights of citizenship.<sup>9</sup>

Statements such as the above reflect a basic inability to understand the nature of treaty rights. In some cases, as in the case of fishing rights, Indians *do* have a different status from U.S. citizens, because they are members of a tribe which has a treaty with the U.S. government which secures those rights and is "the supreme law of the land . . . anything in the constitution of laws of any state to the contrary notwithstanding."<sup>10</sup>

There is also a great deal of alarmist agitation going on over the 50% figure which the Boldt decision mandates Indians should have the opportunity to catch. Opponents claim that, due to the exemptions of on-reservation, subsistence and ceremonial purpose fish from inclusion in the calculation of the Indian allocation, Indians will wind up taking 70% of the actual harvest. In 1976 the Indian fish catch was 13% of the total — a far cry from their allotted 50% much less the panic estimate of 70%. Indian fishermen rate a distant third behind both non-Indian commercial fishermen and sports fishermen in the size of their catch.

State governments complain that Indian fishing rights are outmoded, impinge excessively on state sovereignty, operate discriminatorily, and undermine state fish conservation programs. The discrimination charge has been dealt with above. Further, it is worth noting that Indian fishing rights are consistent with other systems employed by federal and state governments that distribute benefits unequally. Veterans, students, farmers, the disabled, the indigent, and senior citizens are all "beneficiaries of special projects which, by awarding members of one class certain benefits arguably discriminate against all non-members of the benefited class."<sup>11</sup> Selective distribution of economic benefits is also evident in federal and state tax systems. "Unequal benefit distribution, is, therefore, simply a fact of life in a modern industrial society."<sup>12</sup>

Indian fishing rights certainly cannot legitimately be held to be "outmoded." Federal cases have consistently recognized that the right to fish is essential to the economic survival of Indian tribes. "Either purchase or restriction or regulation of the fishing right could possibly affect seriously the economy of several thousand Indian people," wrote Assistant Secretary of the Interior Carver to Senator Jackson in a letter of August 4, 1964. The protection of Indian fishing rights is well within the scope of Congress' commitment to the furtherance of Indian economic security. The Congressional commitment to protecting Indian off-reservation fishing rights is evidenced by its provisions to replace Indian fishing sites that would be flooded as a result of the construction of new dams on the Columbia River. Congress has also refused to recognize an 1865 treaty with the Warm Springs Indians which supposedly relinquishes their treaty off-reservation fishing rights, in favor of an earlier treaty which secures those rights to the tribe. In light of Congressional commitment to the furtherance of Indian economic security, it would seem that the "propriety of any restriction on Indian fishing must be measured in terms of whether it inhibits or promotes Indian economic security."<sup>13</sup>

Considering that the Indian take of the total fish harvest was in 1974 7%, in 1975 11%, and in 1976 13%, it seems absurd that non-Indian commercial and sport fishermen should blame Indian fishermen for the decline in salmon runs over the years. Yet the assertion that Indian fishing is a serious threat to the conservation of the salmon and steelhead resource in the Pacific Northwest is a major argument advanced by those in favor of state

regulation of Indian fishing and against the Boldt decision. The primary reason for the decline in salmon runs in the Pacific Northwest is the destruction of the environment. Dam building, pollution, and logging operations are three major contributors to the destruction of the salmon environment. The Idaho Department of Fisheries estimates that salmon runs on a river are reduced by an average of 10% by each dam constructed.<sup>14</sup> The Grand Coulee Dam completely destroyed over 1,100 miles of salmon spawning rivers and streams. Logging operations can change the rate and amount of runoff, temperature, silt and oxygen content of salmon streams making them unfit for spawning. The effects of dumping pollutants into salmon streams and rivers are obvious. These changes which have caused the deterioration of the salmon environment are clearly not the fault of Indians. Indian tribes have not built dams, dumped sewage, industrial and atomic wastes into streams and rivers, have not cut down forests and destroyed the vegetative cover of the land (which causes stream temperatures to rise beyond the point tolerable by salmon) with subdivisions. In fact "non-Indian fishermen might more appropriately look for the root of their present dilemma in their own numbers, the inevitable pressure of white commerce and growth, and the misdirected management policies of the State Department of Fisheries."<sup>15</sup>

Because Indian fisheries are often located in or near the mouths of streams and rivers to which spawning salmon return, Indians are accused of taking a "disproportionately high percentage of spawning runs."<sup>16</sup> The logic behind this assertion is somewhat obscure. Those who make it seem oblivious to the obvious fact that *all* salmon are potential spawners wherever they are caught. "The crucial question is whether enough fish get to the spawning grounds and spawn, not where the fish which are caught are taken."<sup>17</sup> Enough fish have to get by each fishery, not just the Indian fishery, in order to assure continuation of the runs. Considering that Indian fishermen took only 13% of the total salmon harvest in 1976, and therefore less than 13% of the potential spawners, it seems somewhat absurd to accuse them of being *the* major threat to the conservation of the salmon resource.

State regulation of Indian fisheries is unacceptable at best. Given the attitudes of state governments towards Indian fishing that have been discussed above, it is clear that Indians must rely on federal protection to insure that they be allowed to exercise their treaty fishing rights. The Supreme Court has frequently asserted that the protection of Indian rights is within the special province of the political branches of the federal government. States have the responsibility to see that federal Indian treaties are honored. The record shows, however, that states have done a very poor job indeed of meeting this responsibility. There have been scores of cases in which the U.S. is plaintiff, as trustee for an individual Indian or a tribe, against the State for violation of Indian treaty rights. To place regulation of Indian off-reservation fishing under the jurisdiction of state governments, particularly in the Pacific Northwest where local feeling runs high against Indian fishing, would be tantamount to allowing state seizure of Indian fishing rights. Indians would have small chance of exercising the treaty rights so necessary for their economic survival. Indians have no leverage beyond the original treaties of cession which they signed with the federal government since their lands, the original source of their political power, have been ceded. They are dependent upon Congress for vindication of their claims. Because of local feeling against Indians, because of their small numbers, lack of funds and technical know-how, Indians are not as able to protect their economic interests through the state political process as are other interest groups. For example, the Washington State Department of Game could afford to hire people to make a convincing film depicting Indian fishing as universally detrimental to salmon and steelhead and threatening to sportsmen.<sup>18</sup> Indians, on the other hand, lacked funds and know-how to present their own side of the story in mass-media form. Furthermore, Indian fishermen, unlike sport fishermen, have no state agency to promote their interests vis-à-vis commercial fishermen. Non-Indian anadromous commercial fishermen already have an advantage over Indian fishermen in that their fishing sites are located further down river on salmon streams and rivers, and even out into the ocean, giving them first chance on runs of anadromous fish.

The Boldt decision is by no means the only one which limits State authority in regulating Indian treaty fishing. In *Sohappy v. Smith* (1969) the court ruled that a federal Indian treaty compels the State to recognize the Indian fishery as a distinct entity, and that State fishing regulations must assure that a "fair share" of the harvestable fish escapes non-Indian fishermen and is available to Indian fishermen. The decision in this case invalidates state regulations which promote both conservation and non-Indian economic interests because such

regulations had not permitted Indians to land a fair share of the harvest. In *Umatilla Tribe* (1963) the court ruled that the State must restrict non-Indian fishing before it restricts Indian fishing for conservation purposes. In *State v. Tinno* (1972) the Idaho Supreme Court ruled that Idaho cannot regulate Indian treaty fishing "unless it clearly proves regulation of the treaty Indians' fishing in question to be necessary for the preservation of the fishery."<sup>19</sup> And in *U.S. v. Oregon* (1974-75) the court ruled that Indian treaty fishermen are entitled to the opportunity to take up to 50% of the harvestable share of Columbia River runs destined to reach the Tribes' usual and accustomed fishing places, and states were directed to promulgate rules in cooperation with the Indians.

These decisions enforce the principle that "states should not be able to assert the economic need of one group of fishermen over another in the face of a federal treaty commitment to one group of fishermen."<sup>20</sup> The treaty provision that fishery resources at all "usual and accustomed" Indian fishing grounds are secured to Indians "in common with all citizens of the Territory" imposes upon the State the obligation to arrange allocation of the resource to satisfy Indian economic claims. The State has no such obligation to non-Indians. State power must give precedence to rights secured by the national government — this is the primary principle of any federal system. It might be argued that "full satisfaction of Indian claims at the expense of non-Indian fishermen seems fair because in fact non-Indians are also beneficiaries under the treaty: they live and work on land which the federal government has purchased and cleared of Indians for their benefit."<sup>21</sup> But above and beyond this, "the claim of Indian communities for a decent standard of living from traditional sources speaks for itself as the proper ground on which vindication of such rights may ultimately rely."<sup>22</sup>

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## INDIAN FISHERY PROJECTS

### THE LUMMI PROJECT

The Lummi Aquaculture Project is a success story in Indian aquaculture. It is one of three business ventures which comprise LITE - Lummi Indian Tribal Enterprises. The other two ventures are the Lummi Indian Construction Company and the Lummi Indian Seafood Company which is of course connected with the aquaculture project.

The aquaculture project consists of the Skookum Creek Fish Hatchery, a sea ranching operation, a pan-size research project and oyster hatchery and grow-out operation.

Skookum Creek Fish Hatchery supplies fish for the pan-size and sea ranching operations, and for release into the Nooksack River in order to supplement salmon runs, provide brood stock and contribute to commercial fisheries. In 1976 the hatchery produced 1,850,000 coho salmon, 400,000 fall chinook salmon, 800,000 chum salmon, and 30,000 steelhead trout. Almost all of the chinook and steelhead and about one quarter of the coho and chum were released into the Nooksack. Research is conducted on an on-going basis to evaluate the impact of these releases on commercial and sport fisheries. Over the past five years the hatchery has released over eleven million coho, chinook, and chum salmon and steelhead trout into the Nooksack River and Puget Sound.

The sea ranching operation involves the transfer of coho, chinook, chum and steelhead during spring months from the hatchery to the sea pond, where the fish are held for two or three weeks before being released to migrate to the sea. They remain at sea for from eighteen to forty months and then return to the sea pond where they are captured by a trap set just inside the inlet gates. The rate of return on the 1976 coho salmon run was 1.6%, about 22,000 pounds of coho. These fish are sold on the open market through LISCO.

A small percentage of the hatchery coho are kept in the sea pond for the grow-out season. They are reared in nets that form a huge bag suspended from a walk-way system. The fish are grown to "pan size" — about  $\frac{3}{4}$  of a pound each, and are monitored to watch for disease, growth rates and meat coloration.

The oyster operation began in 1969 as a pilot project and started commercial operation in 1972. A hatchery produces seed oysters on a sustained basis. The seed oysters are planted on the tidal flats outside the dike of the sea pond and inside the pond, and grow for four years before they are harvested. In 1976, 100,000,000 seed oysters were produced by the hatchery, mostly of the Giant Pacific variety. The hatchery is able to produce seed oysters regardless of weather and other natural conditions. Excess seed is sold to other oyster growers. By 1976, 200 million seed oysters had been planted. Harvest will peak in 1980 when about 100,000 gallons of meat will be available on the market. The project processes and markets its own oysters on both retail and wholesale bases. Vertical integration of the entire operation provides for maximum returns and sustained jobs.

The Lummi Indian Seafoods Company processes all the Lummi seafood products. It also works directly with Lummi fishermen and LITE's finance group to help fishermen get boat and gear loans from local banks. Other LISCO services to fishermen include:

- 1) Constant and nearby tender service with LISCO's MV Nushagak. The boat serves as a buying station and provides food, hot coffee, beverages, boat fuel, emergency service for breakdowns and relief in bad weather.

- 2) A floating buying station in Bellingham near popular fishing grounds which provides the same services as the Nushagak.
- 3) A buying station at the fishing village on the Nooksack River which includes a boat ramp and yard-service area.
- 4) A 50-foot multi-purpose boat transports fish from buying stations and acts as an emergency tender to aid fishermen in distress.

All Lummi seafoods are processed for sale at the Lummi Seafoods Center. Products include Pacific Ocean Salmon, Yearling Coho Salmon, and Herring Roe. Because the Center's location is so close to all production centers, all products can be harvested, processed, and delivered to the freezer or sold fresh all in one day.

The fishing/processing year begins with an early run of King Salmon. At the end of March herring roe is processed for sale in Japan with the help of Japanese technicians. When the herring fishery ends in June, salmon season opens and continues through the end of the year.

The Lummi market center is the final link in the chain of the Lummi seafood business. Operating out of Seattle, it has, through extensive press coverage and advertising directed at food distribution networks, created a market for Lummi products which insures the continuing success of the aquaculture project.

## **PYRAMID LAKE**

In 1973 the OEO approved a grant to the Pyramid Lake Paiute Tribe of \$600,000 to restore the Pyramid Lake fishery which was destroyed by the diversion of Truckee River water for the Newlands Irrigation Project. In 1974, the tribe received \$343,000 from the Interior Department for the same purpose. Since then the tribe has formed the Pyramid Lake Indian Tribal Enterprise as a counterpart to a Community Development Corporation and completed construction of the Dunn Fish Hatchery and an in-lake net pen. The pen is used to rear hatchery cutthroat trout until they are beyond predation by larger fish and ready to be released into the lake. In 1977, 40,000 pounds of hatchery-produced cutthroat trout, coho salmon, and cui-uj were planted in the lake. Translated into numbers of fish this probably equals about one million.

A grant of \$532,000 was approved by OEO through ONAP for the tribe to construct a fish processing plant. The processing building has been constructed but is not yet equipped to process fish. \$150,000 is needed to finish the project. A plan has been devised to allow both the hatchery and the processing plant to operate at maximum capacity on a year-round basis. Since the hatching and rearing of cutthroat trout in the net pen occupies only half of the year, the plan was to hatch and pen-rear coho salmon during the off-months for the cutthroat trout. However the coho salmon couldn't be successfully reared in the net pen because due to their hatching schedule they were placed in the pen during the summer months when water temperatures were above the point tolerable by the salmon. The tribe is now working on developing a shore-rearing system for the coho salmon. The hatchery produced fingerlings will be reared in tanks constructed on the lake shore and supplied by bottom water pumped from the lake.

A second hatchery capable of planting up to 10 million fingerlings per year into the Truckee River is being planned by the tribe. Funds for this hatchery were appropriated by Congress in 1976. Construction is scheduled to begin in 1978.

## **OTHER TRIBAL PROJECTS**

The Passamaquoddy tribe is currently involved in the development of a tidal power plant project which would incorporate a complementary mariculture operation that could utilize products and by-products of the power plant. A variety of marine organisms could be raised in several possible systems which could utilize energy from the plant to circulate water and control water temperatures. The dam which is part of the proposed power plant project alone would increase water temperatures and food supply, and decrease the scouring action of high

tidal currents in the tidal basin where it would be constructed. The tribe has done feasibility and ecological studies for the project. They have submitted proposals to ERDA and other energy agencies for a grant of the \$500,000 to \$600,000 needed for further study and design, and are currently waiting for the funding necessary to continue with the project.

The Passamaquodys also have a fish processing plant and docks constructed with \$350,000 from a Local Public Works grant. The plant is a small one designed to process local market fish and groundfish, and is not yet in operation. The tribe is working on developing a market for their products.

The Shinnecock Bay Senecas have a shellfish rearing operation which got started with a grant from EDA. Cysters from ponds near the reservation are transplanted into the tidal flats of the Bay. The Seneca aquaculturists were trained at the Lummi School of Aquaculture. The tribe now wants to start a mini-hatchery.

The Seminole tribe of Florida has conducted a three year feasibility study into the potential of aquaculture as an agri-business for the tribe. The study was funded through the EDA's Technical Assistance Program and included the construction of a pilot fish farm to raise channel catfish in static ponds. The fish farm construction was funded by an EDA Public Works Grant. The tribe has been unable to obtain additional funds for the development of the project and is currently operating the pilot farm at an economic loss. The tribe has planned the expansion and improvement necessary to turn the project into a commercial aquaculture program capable of generating revenue for the tribe. However, funding must be obtained before the tribe can implement its plans. The Seminoles are currently involved in soliciting the needed assistance.

Most tribes in the Pacific Northwest have some kind of fishery enhancement program. The following are only a few of the existing and planned operations: The Quinault tribe has a program of stream improvement and planting, a hatchery, and a fish processing plant. The Tulalip tribe has recently started a fish buying co-op. The Lower Elwha tribe has a hatchery for the production of chum salmon, which are released into streams and then migrate out to sea. National Fish Hatcheries are being constructed on both the Makah and Warm Springs reservations. The Nez Perce, Umatilla, and Yakima tribes are all planning to construct rearing ponds on their reservations, hopefully to begin operating by fiscal year 1979.

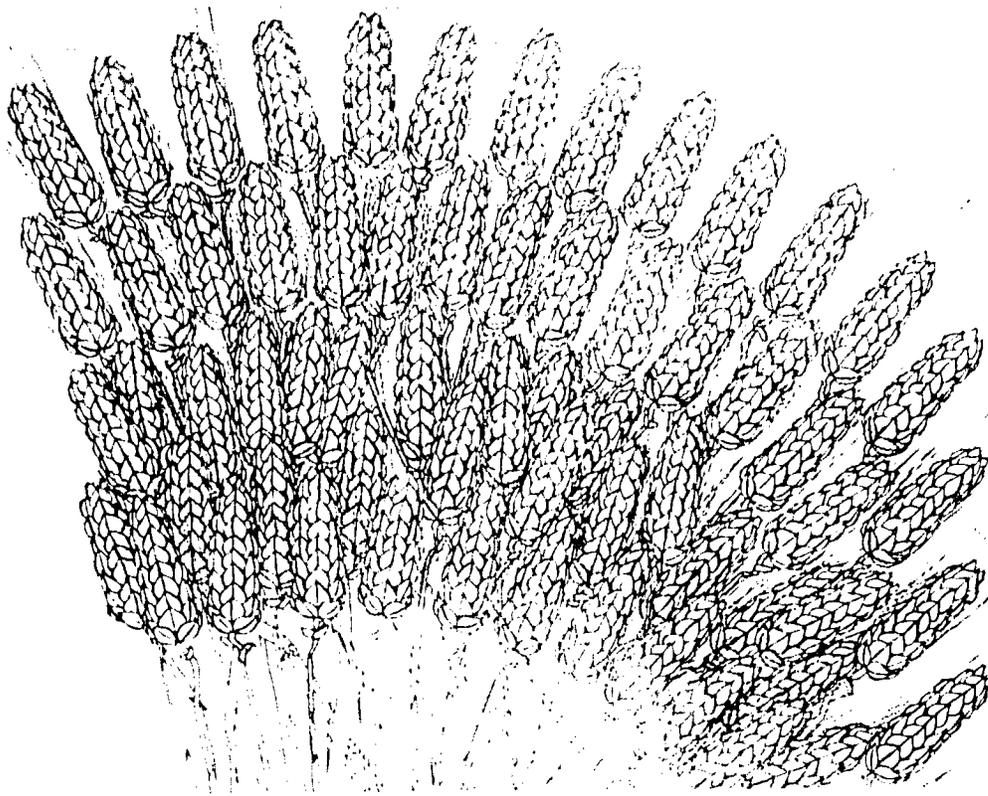
Further information on operations in the Pacific Northwest can best be obtained from the Northwest Indian Fisheries Commission, 2625 Parkmont Land, Bldg. C, Olympia, Washington 98502.

#### ADDITIONAL SOURCES

*Bardach, Ryther, and McLarney. Aquaculture. New York, 1972, pp. 1-28.*

*Christy, Francis Jr. Alternative Arrangements for Marine Fisheries. Washington, D.C., 1973.*

*Kasahara and Burke. North Pacific Fisheries Management. Washington, D.C., 1973.*



CHAPTER 11  
INDIAN AGRICULTURE.  
YOU REAP WHAT YOU SOW

*There are many stories told about how the Indians helped the pilgrims to survive in the "New World". As the favorite story goes, the Indians taught the newcomers to grow corn by planting three grains of corn and a fish in a hole in the ground. The Indian humor version, of course ends that the Indians were trying to grow fish -*

Indians have suffered several stereotypes in regard to agriculture. The basic misconception probably hinges on the history books again wherein we - both Indians and non-Indians - are given the distorted view of Indians alternately as bands of savages roaming the countryside and as euphoric children lounging around sipping the milk and honey magically provided, I suppose, by the Great Spirit. There is an almost total lack of recognition of the economic systems that were in place, many of which depended on the cultivation and trading of crops.

Some tribes were highly skilled farmers. Other tribes wouldn't be caught dead farming - some were hunters and gatherers who followed the migrations of game. Some were fishers. Some were all of the above.

As seems to be the case with everything else in today's specialized society, simply defining "Indian farmer" is a problem. Knowing that "Indian" is a misnomer to begin with, you would think that at least a nice simple definition of "farmer" would be easy to find in your trusty Dictionary. I found that a farmer is -

"A person who earns his living by farming; especially one who manages or operates a *farm* or a person who contracts to collect taxes or revenues by paying a fixed sum to the government for the right to do so."

So I tried "farm"-

*farm* farm n. (ME ferme rent, lease, fr. OF, lease, fr. fermer to fix, make a contract, fr. L firmare to make firm, fr. firmus firm) 1 obs: a sum or due fixed in amount and payable at fixed intervals 2 : a let-

ting out of revenues or taxes for a fixed sum to one authorized to collect and retain them 3 : a district or division of a country leased out for the collection of government revenues 4 : a tract of land devoted to agricultural purposes 5 : a plot of land devoted to the raising of animals and esp. domestic livestock b : a tract of water reserved for the artificial cultivation of some aquatic life form 6 : a minor-league baseball club associated with a major league club as a subsidiary to which recruits are assigned until needed or for further training.'

Then I learned that a ranch is a big farm -

*ranch* (ranch) n. (Sp. rancho, small farm, group of people who eat together, mess), 1. a large farm, with its buildings, lands etc., for the raising of cattle, horses, or sheep in great numbers; term used especially in the western United States. 2. any large farm devoted to the raising of a particular crop or livestock: as a fruit ranch . . . 3. all the people living and working on a ranch. v.i. to work on or manage a ranch. v.t. to put (an animal) to graze on a ranch.'

For the purposes of this chapter, the term "farm" and "farmer" include "ranch" and "rancher." They do not include taxes or tax collectors or minor league baseball clubs.

#### **ALL INDIANS WALK IN SINGLE FILE -**

Who knows what mystery lurks in the minds of men (white -) that would lead them to translate the early gifts of corn, squash, chocolate, cotton, peanuts, potatoes, pumpkins, tobacco, and tomatoes to the "pilgrims" into a policy that all Indians should be farmers? The same one, perhaps, that produced the idea that "All Indians walk in single file - the one I saw did -" or that "all Indians have good hand-eye coordination" and "all Blacks have rhythm."

There are endless stories about the early efforts to transform all Indians into farmers. Some are often used to justify the government's subsequent leasing policy. For instance, the Comanches, who once roamed the Great Plains from border to border were eventually forced onto a reservation in Oklahoma which was then broken up into allotments. The Comanches were meat eaters - buffalos, deer, elk, antelope, etc. When the game disappeared, the government imported sheep. The Comanches found the look and smell of the sheep so distasteful that they couldn't imagine anyone eating such a thing. So they used them for target practice! Another time, some breeding stock was brought in for the Comanches to start cattle herds. With the wild game gone and their families hungry, many ate their cattle.

Indians have learned to cope with many of the government's idiosyncracies through experience. The government, however, seems to be a slow learner. There is a very similar story about Peace Corps workers in the 1960's who decided that a very expensive special breed of chickens was just what a small village in a South American country needed. They supplied the chickens along with a complicated set of instructions for their care. When they returned a few months later to check on their progress, they asked the villagers how they liked the chickens. The villagers gratefully replied that they were the absolute best they had ever tasted.

Finding that it was much easier to lease out Indian land than to assist Indians in true economic development, the government adopted leasing as its primary policy.

Many tribes and individuals are attempting to turn that policy around and are beginning to reclaim their leased-out land and/or to demand fair rates of return on their leased land. This has caused and will cause political and economic repercussions from those who have become accustomed to making their living off Indian lands as they see their lifestyles threatened.

It was, I suppose, just one of those curious quirks of history- or historians- that caused the tribes on the East coast who were skilled in agriculture and entered into competition with the Europeans to be called "civilized" and those in the west with more complex agricultural systems (irrigation, for instance) to be called "primitive."

while the lust for gold was the prime motivation for the westward and homestead migration, the "golden harvest" was clearly the motivation for staying.

#### FORTY ACRES AND A MULE

The Indian land base had shrunk from the entire North American continent to 165,929,710 acres by 1875 which was the height of the treaty period.<sup>4</sup> By 1887 when the General Allotment Act was passed, another 29,000,000 acres had been ceded. The Allotment Act which was designed to deal a death blow to Indian reservations - and very nearly did - established a policy little better than the "Forty Acres and a Mule" syndrome which followed the Civil War. Indians got 160 acres and a cow or a sheep or nothing or whatever struck the fancy of the local Indian agent. The rest of the reservation land was opened up for white settlers. Fortunately, there weren't enough interested white settlers to immediately gobble up all of the land. By 1934 when the Indian Reorganization Act put an end to the Allotment Policy, there were 34,287,336 tribally held acres and 17,622,700 acres allotted to individual Indians which were held in trust by the Federal government. By 1975, for various reasons, the tribes had regained roughly six and a half million acres, but the individually owned allotments had shrunk by roughly six and a half million acres leaving the total held in trust at 51,845,292.<sup>5</sup> Some of those 6 1/2 million acres may have been the same land, but that is doubtful. Individual allotments were more likely to be the choicer spots on the reservation, therefore, they were more likely to be purchased by white settlers. The depression which drove many farmers out of business made some land available for purchase by the Federal government. Under the terms of the Indian Reorganization Act, the government was able to add these failing farms to the land base of some reservations. The Allotment Act created great problems for those tribes affected by it, particularly for would-be farmers. Often the size of allotments made farming economically unfeasible. Additionally, individual farmers were unable to make the capitol investment necessary to buy equipment and stock. The Federal government was as unskilled in assisting Indians to adjust to their new found policy as Indians were and consequently fumbled and stumbled, cheated, and retreated until they honed in on a method they found easiest for themselves - leasing out Indian land to non-Indians, often to their own Agents.

Meanwhile, back in the West, those reservations who suffered less from allotments were poked and prodded by the Feds into a system of assignments much like the allotment system except that the assignments were made only to tribal members. Those assignments, because they were "made" by the tribal governments have come to be looked upon as "traditional" and therefore unchangeable. This has compounded the problems of those tribal governments in designing economic systems for their tribes as a whole.

#### HOW MUCH INDIAN AGRICULTURE?

Agriculture - The science or art of farming; work of cultivating the soil, producing crops, and raising livestock.<sup>6</sup>

All Indians are not farmers, but some are. Approximately 69% of all Indian trust land is classified as being devoted to agricultural purposes. Of that amount, 4.7% or roughly two and a half million acres are croplands and 64% or roughly 33.2 million acres are grazing lands.<sup>7</sup> A comparison of the Nation's and Indians' croplands and crop values in 1969 (the last year such data was available) is as follows:

Type of Farming	Nationally	Within all Indian Reservations	
	(million acres)	(million acres)	(% of Nation)
Non-irrigated	420	1.83	0.44
Irrigated	39	.97	2.48
Total	459	2.80	.61
Total value of crops grown	\$45.6 billion	\$136.3 million	.03

In 1973, Indians farmed about 638,000 acres of reservation land; non-Indians leased about 1.9 million acres and an additional 168,000 acres were idle. About 10,500 Indian families obtained all or part of their livelihood from farming their land. That year, Indian croplands produced agricultural products worth about \$259,000,000.<sup>7</sup>

In 1974, BIA statistics showed that 2,440,172 acres or 4.7% of all Indian trust land was classified as agricultural (cropland). Of that number of acres, 29% were irrigated and 71% were dry farm. The value of products grown was \$339,919,790. Non-Indians cultivated approximately 63% of the land and made 73% of the money. The following table shows the gross value of products grown and the actual number of acres used to grow such products.

INDIAN AGRICULTURAL LANDS USED BY INDIAN AND NON-INDIAN OPERATORS AND GROSS VALUE PRODUCT, 1974

Operator	Acres	Type of Land				
		Dry Farm		Irrigated		
		Gross value, product	Gross return per acre	Acres	Gross value, product	Gross return per acre
Indian	584,630	\$ 38,643,144	\$ .68	70,998	\$ 24,433,041	\$344
Non-Indian	936,649	111,617,105	119	247,047	134,891,467	460

Source: 1974, form 80-1.

Approximately 64% of all Indian land is classified as open grazing. Of the 33,282,203 acres so classified, 86% is used by Indians; 13 percent by non-Indians and 2 percent is idle. Indians use the bulk of land, however, non-Indian operators were more productive as indicated in the following table, making over four times as much per acre

-GRAZING ACTIVITIES: ACREAGE AND GROSS VALUE PRODUCT, 1974<sup>10</sup>

Operator	Acres used in 1974	Percent	Gross value product	Gross value product per acre
Indian	39,569,133	89	\$53,565,224	\$1.35
Non-Indian	5,099,413	11	35,188,583	6.90

Source: 1974, form 50-1.

### ARE NON-INDIANS BETTER FARMERS?

Why is there such a difference in productivity? Are Indians simply not as capable as non-Indians? Not likely! There is reason to believe that they may often be more capable in order to make as much as they do. Sound like racism? Wrong, it's economic reality. Why?

#### 1. IT'S MORE DIFFICULT FOR AN INDIAN TO OBTAIN FINANCING.

An Indian farmer farming his own trust land or tribally owned trust land has the immediate problem of financing a farming operation. Local banks are often reluctant to finance an Indian. There is sometimes a touch of racism in this attitude, but more often it is a mixture of ignorance and competition for available money. Most bankers and even most Indians do not understand the intricacies of using trust property - or rather the potential income from trust property - as collateral. The Bureau of Indian Affairs has only recently begun to recognize that possibility and often slows up or complicates the procedure. Jurisdictional issues, both real and perceived, cause reluctance on the part of a potential lender. If a lender loans money on a piece of equipment or on livestock or some other moveable material, they want to be sure they can repossess it if they need to. Some tribes will not allow this. Others require that a creditor sue in tribal court. Tribal courts are unknown quantities to the non-Indian community. Just as Indians feel that they are not likely to get a fair deal in state or local court, non-Indians feel that an Indian court probably will not give them a fair shake. Banking regulations require that those investing the money of the depositors demonstrate that the depositors' money is secured to the maximum extent possible.

It is sad, but true, that many Indians are considered poor credit risks through no fault of their own. Lack of

education often prevents an Indian person from gaining the kind of experience or job that would allow him to build a credit record. It becomes a vicious circle from which there seems to be no escape.

It is also sad, but true, that not all Indians are good credit risks anymore than it is true that all non-Indians are good credit risks. Even the most honest, hardest working individual sometimes suffers problems that prevent them from meeting the obligations they made. Not all of us are honest and hardworking regardless of our ethnic persuasion.

## **2. AN INDIAN WILL PROBABLY HAVE TO FARM POORER LAND.**

It is quite likely that an Indian farmer will wind up farming poorer land than a non-Indian. It is fair to say that reservation areas were most often set aside because they were lands that nobody else wanted at that time. If he's fortunate enough to have a decent piece of land, chances are he's been encouraged by his trustee to lease it out because lease payments are sure things and making a crop is not. If he has to lease land other than his own in order to make it economically feasible to farm, he probably won't be able to out bid others for the best pieces of land. Indian farmers probably won't have the capital to invest in the latest equipment or buy the best breeding stock.

He probably has to work at another job to feed his family and farm part-time.

Indian farmers have to work harder, be more innovative, and be more patient and persevering than any others. That's not an easy row to hoe (pun intended -) considering that all farmers have to work harder, be more innovative, patient and persevering than the rest of us.

## **CURSING THE DARKNESS**

Indians who would be farmers face many problems not of their own making. Some of those problems have been created by government policies. Some are unique to Indians. Others are problems that all farmers face. Some of those are as follows:

1. *Farming has become a highly technical and specialized business.* Not so long ago, the feeling was that if you had no special skills or education, you could always be a farmer. Not so in this day and time. A farmer or a rancher not only has to be highly skilled in the mechanics of putting in and harvesting crops and the raising of livestock, he has to be knowledgeable about government regulations of many kinds, high finance, and marketing. He has to be something of a sooth-sayer as well - forecasting what will be marketable by the time he can bring a crop to market. He has to be an accountant so that he knows how much it will cost to produce a crop of any kind. If he has to seek up-front financing for his crops as most farmers do, his credit source will demand this kind of information. He has to know how much he can afford to pay for land. He has to know how much land he will have to have in order to make farming pay enough to support his family. He has to know how much and what kind of equipment he's going to have. He's going to have to know about pest control - what kind he will need, how much it will cost and what the dangers are to him, his family and his community. He has to know the law concerning their purchase, transportation, use, storage, and disposal. He has to decide whether he will use irrigation or not. He must know what the effects of irrigation will be on the production of crops, how it will affect the future productivity of the land and how it will affect water quality. He has to know whether water will be available and how much it will cost projecting as far into the future as possible. He has to know something about national and international politics. For example, if energy costs continue to rise as it appears they will, a farmer has to understand the political power of the energy companies in this country and the world. It not only affects the dollars to be spent on energy in the actual production of crops, it affects the cost to the consumer in the marketplace. He must understand the competition for water. A farmer must know the cost of labor, and reports required by various state and federal laws.

2. *The selling price of the products farmers produce has not risen proportionately to the prices he must pay in*

*order to produce them. A farmer is compelled to maximize efficiency in order to compete. Mass production and advanced technology have come to be the gods of the marketplace. Supposedly, the more you produce, the less the unit cost of the product will be. The entry of multinational corporations into agribusiness makes it more and more difficult for the "small" farmer to compete.*

*3. The competition for financing is increasingly keen. Inflation makes fewer "real dollars" available for everybody. Dollars for farmers are becoming harder and harder to find. Dollars for Indian farmers are shrinking proportionately.*

*4. The Federal government has failed in carrying out its trust responsibility, its legal and its moral responsibilities to Indians. Land has been lost. Irrigation projects have never been completed. Water has been drained away from its Indian owners. Programs have been hard to impossible to qualify for even when they are specifically Indian programs. Government officials assigned to work with Indians have ranged from highly qualified, sincerely dedicated individuals to incompetent and corrupt Charletans. Inconsistent leadership and policies have made it difficult for the best to function and for the worst to be called to account for their actions.*

*5. The government, which once used the "trust responsibility" for doing what it wanted to do with Indian resources is now using the "trust responsibility" for preventing Indians from doing what they want to with their own resources. Indian agents who once blithely approved any old offer that came along will now take a year to five years to approve an Indian proposed arrangement. This is not necessarily meanness on their part though it sometimes is. Tribes have brought cases - and won - against their trustee for failure to fulfill the trust responsibility. Indians or Indian tribes who are exercising power over the development of their own resources are taking that power from someone who once wielded it. No one gives up power easily. Change is frightening. A new definition of trust responsibility is evolving. Both Indians and their trustee are unsure how it will turn out. It could be a situation where you're damned if you do and damned if you don't.*

### **So What's A Poor Indian To Do?**

Something you cannot do is expect someone else to do it for you or to think that there is a magic answer. Indians have to find out for themselves what the possibilities are. Often you have to educate your trustee, the local Bureau of Indian Affairs. Then you have to present your case to the lender in terms that he is familiar with. For example, a local banker is accustomed to loaning money to a non-Indian farmer who brings in a lease on Indian land and wants money to raise crops or cattle on that leased land. Yet the same banker won't give the time of day to an Indian farmer who wants to borrow money to farm the same kind of land. Chances are, both could offer the banker a lease-hold interest as collateral; that is, should either be unable to make the payments, the banker would have the right to farm or have the land farmed until the money is repaid. The non-Indian probably is a person the banker knows, who has other land and possibly other loans already. The banker may even know that in order to make a success on the land the non-Indian already has, he needs this additional acreage to make his entire farming operation pay off. He knows that if worse comes to worst that the county sheriff will serve the papers and that's all it takes for him to call in the debts. It is something and somebody he's familiar with.

The Indian, on the other hand, is probably an unknown quantity. The banker is not sure what the rules are when the Bureau of Indian Affairs or the tribe and possibly the tribal courts may be involved. The competition for money is keen. It's just easier to deal with the familiar.

In order to compete, the Indian farmer will probably have to enlist the support of his local BIA agency, his tribe and go to a banker with a good well thought out plan of operation which shows how he plans to farm the land, when he will need cash and how and when he plans to pay the money back. He'll need a good financial statement showing both his assets and liabilities. He's got to be able to explain the role of the Bureau of Indian Affairs in his business and his tribe's role in his business. What are the jurisdictional issues regarding reposses-

sion of property? Are there tribal environmental codes? If there are, how will they affect farming practices? Are there water rights issues? These are things any farmer should know and therefore it is not an unusual or unreasonable requirement.

All is not hopeless. There are some things on the other side of the scale that can be used. For instance, the tribe may be using a local banker or banks for tribal business. With the amounts of money that go through the bank, it is probably in the bank's best interest to take the trouble to learn to do business with individual Indians. This may be a fact that hasn't been called to their attention. A letter of introduction from the Tribal Chairman may be all that is needed to assure that the banker hear you out. You won't get a loan on that basis, but you will get a chance to make your case.

The Production Credit Association in your area is a source of credit for crop production. You will have to present the same financial information to them, but they are familiar with loaning for crop production.

It is possible for a group of individuals to set up a co-op for financing farm equipment. A tribe could establish such a co-op. Co-ops will only work with a good management system with a good set of rules that the members honor.

The American Indian National Bank was established with the idea that it would develop expertise in financing Indian ventures. They are bound by the same laws as any other bank, but they should be familiar with how Indian financing can be accomplished.

The Department of Agriculture's various loan programs are beginning to be opened up to Indians. Other advisory services provided by Department of Agriculture are becoming more accessible.

The Indian Financing Act should have provided financing which would be more accessible to Indians. Unfortunately, it has been, for the most part, poorly administered and grossly underfunded.

### **Tribal Farms**

Farming as a tribal enterprise is a possibility that has been over-looked until the past few years. Several tribes have proved that this can be a viable economic venture. Ak-Chin, Gila River, Colorado River Indian Tribes, and others have successful tribal farms. Attached as an appendix to this chapter is a description of the Colorado River Indian Tribes Farm operation.

One of these farms came into being when the Chairman became friends with a local farmer who was leasing the land. The Chairman asked the farmer what he would do if the land were his. "I'd cancel the leases and farm it myself" was the answer. That's what they did. They cancelled that farmer's (and others) leases, hired the farmer to start the Tribal Farm and went into business. They had problems getting the Bureau of Indian Affairs approval and then getting financing. The farmer, already independently successful and experienced in dealing with financial institutions, was able to assist them in overcoming those hurdles. They were able to do that by finding out for themselves how to do it; showing their trustee how and providing a detailed operation plan to the financial institution. The operation plan included provisions for the involvement of the lender in farming decisions such as who the manager would be. A contract was drawn up spelling out the responsibilities of the manager, and the role of the tribal government. A profit sharing incentive was included in the salary agreement. Because the farm manager's reputation as a farmer was good, the plan of operation was good and the tribe was insistent, the BIA and the lending institution agreed. They were convinced that it was a viable economic venture with a reasonable chance for success - a sound business investment. Other tribes were able to follow this lead. Any tribe can - well, almost any tribe.

that a tribal farm operation has to be on tribally owned land. It could be on land leased from tribal members or even non-Indians!

### **Tribal Farms Are Not Necessarily Rose Gardens**

Tribal farms, if they are to be successful, must be run as businesses. Sound management principles have to apply to a farm as they do to any other business. Tribal members can no more expect to go over to the farm and pick up a head of lettuce or a side of beef without paying than they can from a tribally owned grocery store or the downtown supermarket. There is no reason why a plot of land or a couple of head of cattle for the use of tribal members can't be grown in combination with a tribal farm, but they must be recognized as expenses coming out of the profits which would otherwise be made.

Neither can a tribal farm be looked to as a place for employment for every Tom, Dick, or Harriet that comes along. The manager must be able to hire the people he needs and only the people he needs just like every other business. Loaded payrolls, incompetent or undependable people can be the downfall of any business. Or any tribe, for that matter.

One of the problems encountered by tribal farm managers has been the competition for qualified people. They say that it seems that every time they find a young Indian person with the common sense, the skills and/or education to become a manager, he is hired away from them to run a tribal social service program or to work for the government or private industry. Farming is hard work, the hours are long, salaries may be lower and employment is often seasonal. It takes a special person to be a farmer.

Like any other farmer, tribal farms are subject to the whims of Mother Nature - droughts, floods, bugs and blight - just as they are subject to man-made trials and tribulations such as market manipulation, energy crises and inflation.

Why, then, would anybody want to farm? There are rewards. There is the joy of being surrounded by growing things, of appreciating the changing seasons, of being part of the renewal of life. There is a need for the growing of food stuffs to feed your little part of the world and some of the rest of it. It is a way for tribes to move toward self-sufficiency. Last but not least, there is money to be made. \*

\* Attached is a case study of the CRIT Tribal Farm, which possibly is the most successful tribally owned farm in the country.

## **COLORADO RIVER INDIAN TRIBE**

### **CRIT Tribal Farm**

**By Faith Conlon**

CRIT Tribal Farm is a tribally owned and controlled enterprise which has been in operation for several years. It has been very successful so far — revenues from the farm provide income and jobs for community members.

#### **I. LOCATION**

The reservation consists of 264,092 acres in a valley along the lower course of the Colorado River. Of this land, 225,996 acres are located in Yuma County, Arizona, and 28,366 acres are situated in San Bernadino and Riverside Counties in Western California.

The majority of the land — 258,134 acres — is owned by the tribe. The remaining 38,096 acres are allotted lands.

## *II. CLIMATE*

The valley in which the reservation lies has an elevation of approximately 400 feet above sea level, and is primarily desert. Most of the vegetation in the valley consists of cactus, mesquite, and chaparral.

Average rainfall is very light — about four inches per year. In December and January, the average low temperature is 39, and in June, July and August, the average high temperature is 110 - 113.

## *III. HOW BIG IS THE FARM?*

Currently, the tribal farm has about 4,300 acres in production.

Much of the good agricultural land on the reservation is leased out to non-Indian farmers, although there are some Indian-owned farms on the reservation as well. At present, about 45,000 to 50,000 acres are being leased out.

The tribal farm employs about 25 people year-round, and additional workers are employed on a seasonal basis. Both Indians and non-Indians are hired as employees of the farm.

## *IV. WHAT DO THEY GROW?*

The major cash crops raised on the tribal farm are cotton and alfalfa.

Other crops are also grown from time to time. This year, 320 acres are being leased out at \$150 per acre to a farmer who is raising honeydew melons.

## *V. HOW DID THEY START?*

According to Bill Alcaida, Manager of CRIT Tribal Farm, the farming operation began almost entirely from scratch:

“We didn’t have a shovel to start farming with . . . we just had land out there.”

### **A. Getting Financed**

In the beginning, the farm had some difficulties in getting started and finding sufficient financing. The tribe faced some opposition from non-Indians who had been farming in the area and resented the new competition. There was also much reluctance on the part of the BIA to encourage the tribe, because they felt that the tribal farm would be a failure.

The tribe was supportive of the project, however, and loaned \$50,000 out of its own funds to get the new farm started. The loan has long since been repaid.

From the beginning, the tribal farm has always operated entirely on borrowed money. Each year’s production costs are financed by loans from the Arizona Farmer’s Production Credit Association

### **B. Expanding the Farm**

In its first year, CRIT Tribal Farm had 1,840 acres under cultivation.

As land leases on the reservation terminated, the Tribe had the option of either 1) leasing out the land again, or 2) developing it themselves.

Development costs were often very high, especially if the land was worn-out or badly eroded. However, because the farming operation proved to be a financial success, the farm has been able to increase its acreage un-

der production each year by developing previously leased land. Today, the farm has more than doubled its original size.

## VI. HOW SUCCESSFUL IS IT?

Over the past several years, the farm has consistently shown a profit for the tribe.

Last year's net profit came to about \$87.00 per acre.

In 1976, a particularly good year for the crops, the farm netted a total of \$410,000 — or about \$195.00 an acre.

## VII. REASONS FOR SUCCESS

Many factors are involved in the success of the CRIT tribal farm, but essentially, it boils down to *good management*.

### A. The Plan of Operation

To run the farm efficiently, a Plan of Operation was developed which spells out in detail the procedures for managing and financing the farm. This is particularly important to have because lending institutions want to know how an enterprise will be managed and who will manage it, before making decisions on loans.

The CRIT Farms Plan of Operation was modeled after the Operating Plan used at Ak-Chin Farms.

### B. The Farm Board

The farm is governed by a Farm Board which is appointed by the Tribal Council. Members are selected either from within or without the Council membership.

The Farm Board at CRIT Farm is made up of members who are experienced in farming and who are also committed to the success of the Farm.

### C. The Farm Manager

A qualified manager for the farm is employed by the Tribal Council under written contract. He is responsible for the operation of the farm and for hiring all employees of the farm. In hiring, preference is given to qualified members of the tribe, but the Manager is required to see that over-staffing is avoided.

Because lending institutions — such as the Arizona Farmer's PCA — base their decisions on whether or not to loan money to farms on the past performance and reputation of the farm manager, it is important to have a manager who has a record of past success.

The Farm Manager for CRIT Farms is employed on a profit-sharing basis; he is paid a base salary plus 10% of the net profit from the farm. This arrangement is similar to the one at Ak-Chin Farms, giving the Manager incentive to work hard and make money for the tribe.

### D. Reinvesting in the Farm

To make sure that the farm is able to develop and prosper, at least half of the profits are reinvested into the farm. The remainder of the profits goes to the Tribe. In determining what percent of the net profits will be paid to the Tribe, the following factors are considered:

1. the farm's working capital position (current assets less current liabilities).

2. funds needed to finance operating expenses, taking into consideration the estimated income of the current year.
3. funds needed for planned extension or replacement of facilities and equipment.
4. maturity dates of long-term liabilities.
5. the prospects for agriculture and economy generally.

#### VIII. FINANCING THE TRIBAL FARM

Bill Alcáida points out that the key to obtaining loans for a tribal farming operation is the establishment of a good reputation. It is important to maintain an efficient bookkeeping system so that records are kept straight and all bills are paid on time.

Another factor in obtaining loans successfully is the use of local banks instead of large, national or eastern-based banks. Local banks usually have a better knowledge of the tribal farm's past history, and may have already established a good working relationship with the tribe.

The fact that CRIT Farms has proven to be a productive operation helps to ensure its continuing success. Today the tribe has few difficulties in borrowing money because they have demonstrated that the money will always be paid back.

Getting started is the most difficult part, since at that point lending institutions have little basis for deciding whether or not to loan money to the tribe. That is why it is essential to have a knowledgeable Farm Board and an experienced Farm Manager with a good track record.

#### IX. LEASING THE LAND FOR PROFIT

In addition to the revenues from the tribal farm, income for the tribe is also derived from the leasing of agricultural lands on the reservation. Leasing policies are very carefully managed. The decisions on leasing are made by the Resources Development Subcommittee of the Tribal Council. Before negotiating a lease, they check into the applicant's background, credit history, and financial capability.

At the Colorado River Reservation, no leases are made for a period longer than twenty years. Developmental leases for new or underdeveloped land are broken into five-year periods starting out with a low rental cost per acre for the first five years. This helps to offset the lessee's costs for developing the land and putting in irrigation ditches. The rental cost then increases during each five year period until the final period, when the lessee is charged the appraised value of the developed land.

#### X. BENEFITS OF THE TRIBAL FARM

The success of CRIT Farms has enabled the tribe to achieve a large degree of self-sufficiency.

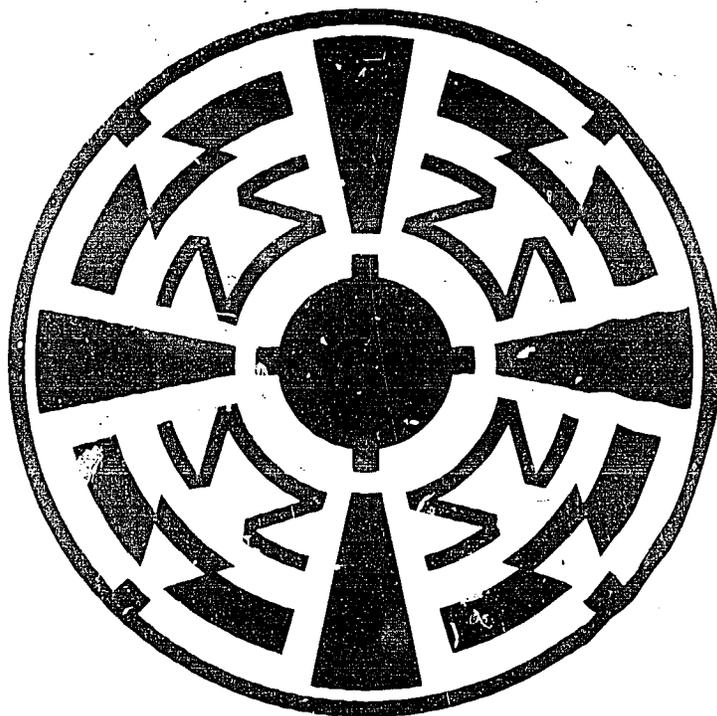
Up to 50% of the farm's final net profit — after deducting 10% of the net profit which goes to the Farm Manager — is available for use by the Tribal Council as revenue. As stated above, the remaining profits are kept as operating capital for the farm.

The Tribal Council puts the farm revenues into a general fund which pays for many community projects and services run by the Tribe. In this way, the profits made by the farm help to serve the Tribe by providing services, new jobs, and income for community members.

#### FOOTNOTES

1. *Websters New Collegiate Dictionary*, G & C Merriam Company, Springfield Massachusetts, 1977, p. 416.
2. *Ibid*, p. 416.

3. Ibid, p. 955.
4. *The Development of Federal Indian Relations, 1775-1952* Department of the Interior, Washington, DC, no author, no date.
5. *Report on Reservation and Resource Development and Protection*, Task Force Seven Final Report to the American Indian Policy Review Commission, U.S. Government Printing office, Washington, DC, 1976, p. 2.
6. Op. Cit., *Websters New Collegiate Dictionary*, p. 24.
7. Op. Cit., *Report on Reservation and Resource Development and Protection*, p. 32.
8. *Indian Natural Resources - Opportunities for Improved Management and Increased Productivity Part I: Forest Land, Rangeland and Cropland*, Report to the Committee on Interior and Insular Affairs, U.S. Senate by the Comptroller General of the United States, August 18, 1975, p. 48.
9. Op. Cit., *Report on Reservation and Resource Development and Protection*, p. 33.
10. Ibid, p. 40.



## CHAPTER 12

### ENERGY

When Indian tribes were forced onto reservations in the West, the U.S. Government had assumed that the lands were of no value to settlers or industry. If anything of value was ever found on these last remaining reservation lands the lands were further eroded by acts of Congress. When the Southern Arizona Copper Belt (now the largest copper producing area in the world) was discovered on the Papago reservation in the 1920's, an act of congress handed the land over to the copper companies. When gold was discovered in the Black Hills on the Sioux Reservation the reservation was moved. When oil and farmland was discovered under the Oklahoma dust, Indian territory was closed and opened to Anglo settlers and oil companies. Now we are finding that vast deposits of coal, uranium, oil and gas, oil shale and geothermal energy reserves lie under Indian lands. Ironically, those resources have become known to tribes at a time when the nation is supposedly mired in an energy "crisis." When President Carter declared the energy crisis the "moral equivalent of war" Indian leaders begin to recall the past exploitation of their lands.

Rather than simply taking Indian lands away the new policy of the federal government has been *leasing* the minerals away. Unfortunately this lease policy differed very little qualitatively from past policies. Under the advice of the federal government, the Northern Cheyenne, Crow, Navajo, Laguna and Hopi tribes have leased away billions of dollars worth of energy resources at ridiculous rates with no provisions for control.

The process of leasing energy reserves has been met with increasing resistance from Indian decision-makers. Indian people want to be in the position where they can control the development (or non-development) of their resources. They want to be sure that they receive the real value of their resources.

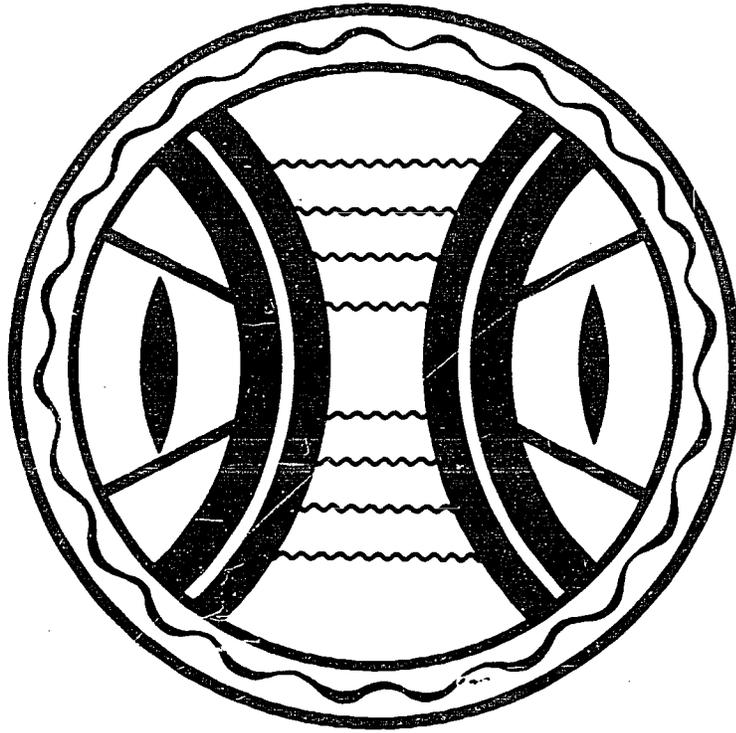
Tribes recognize that these energy resources are exhaustable; that once they're gone they're gone. They also recognize that development of these resources could provide them with the capital they need to develop a viable, renewable economy that can sustain their people at reasonable levels. At the same time they realize that

poorly planned, non-Indian controlled, development could put enormous strains on their culture, health, and social system perhaps even destroying their way of life once and for all.

The energy reserves that tribes own represent a significant percentage of U.S. domestic energy supply. Currently 28% of U.S. uranium production and 12% of World uranium production is from mines on Indian lands (Laguna Pueblo, Navajo & Spokane). Uranium reserve estimates range from 15 - 55% of total U.S. reserves. Thirty-three percent of the Western low sulfur coal lies on Indian lands. Given the desirable characteristics of coal on Indian lands, low sulfur, large seams, close to the surface, it appears that Indian coal will represent a greater percentage of future production than reserve statistics indicate. Although reserves have not been quantified considerable reserves of oil and gas, geothermal and oil shale lie under Indian lands. Three percent of current U.S. oil production is from Indian lands.

Given the importance of these reserves and the experience of Indian people with past government Indian resource policies, it has become clear to many tribal leaders that they must be prepared to defend their interest. Energy owning tribes have formed the Council of Energy Resource Tribes to defend their interest, share information, build a pool of technical expertise and cooperate for orderly development of energy resources if they choose to develop or for mutual protection if they choose not to develop.

While we tend to think of energy only in terms of unrenowable resources such as coal, uranium, and oil, every tribe has the potential of being an "energy" tribe. Renewable energy resources such as solar, wind, tidal power, alcohol production and wood - the bio-mass - can be developed by any tribe. They may or may not be able to export these sources, but they certainly can produce small scale energy for their own use.



## CHAPTER 13 COAL: BLACK DEATH OR NEW LIFE FOR RED CULTURE

By David Logsdon

Coal is abundant and widespread in the United States. The U.S. reserve of coal, an estimated 1.5 trillion tons, is larger than the combined reserves of natural gas, petroleum, oil shale, and bituminous sandstone, but coal use has lagged far behind the use of natural gas and petroleum due to the clean burning and more economical excavation and transportation characteristics of these latter fossil fuels. However, due to the growing shortages of petroleum and natural gas, coal is becoming the focal point of America's search for petroleum substitutes, namely, as a source of synthetic gas, liquified fuels, and lubricants.

As petroleum's role in the U.S. energy system declines, coal will become a critical source of energy for the next 10 to 20 years. At the present, approximately 67% of the U.S. mined coal is used in the production of electricity. By all estimates this figure is sure to rise. A Federal Energy Administration background paper on Project Independence, the government's program for U.S. energy self-sufficiency, predicts an increase in U.S. coal production from the 602 million tons mined in 1973 to 962 million tons mined per year by 1980. The FEA paper states:

This would involve the rapid development of gasification techniques, the setting aside of some secondary air quality standards for a five-year period, expansion of our coal transportation system, the reconversion of oil burning plants to coal, abandonment of price controls on coal, and a major expansion of the coal mining industry.<sup>1</sup>

Until new technologies are developed which would enable the U.S. to tap new energy sources, i.e. the sun, hydrogen fusion, and geothermal energy, coal will seemingly play a major role in meeting the growing energy needs of this country.

Project Independence, while holding great opportunity for the development of Indian resources, may also

lead to an unprecedented campaign to exploit Indian resources, resulting in irreparable damage to Indian lands, cultures, and natural environment. Indians must begin preparing now for the pending thrust to develop Indian coal lands. In order to avert disaster, Indians must secure and maintain control over resource development projects on Indian lands.

## STRIP MINING

As the search for alternative energy sources continues, the pressure to expand strip mining operations in the Western states has increased dramatically. Although only 7.4% of U.S. coal reserves are strippable, strip mining accounted for 46% of the coal mined in 1973.<sup>2</sup> The reasons for the widespread popularity of strip mining in recent years can be seen in the following: in comparison to underground mining, surface mining produces three times the coal per man hour; strip mining requires little manpower; nearly 100% of the coal seam can be recovered by strip mining, whereas the recovery rate of underground mining is only 50%; as a result, strip mining is 40% cheaper than underground mining.<sup>3</sup>

Although strip mining is advantageous to the coal companies, it is extremely destructive to the environment. The uncertain rehabilitation potential of Western coal lands, the impact strip mining has on underground and surface water flow patterns, and the limitations it places on future land use has led to a confrontation between the coal companies and Indian tribes and environmental organizations.

The National Academy of Sciences has conducted extensive research into the rehabilitation potential of Western coal lands. In their report entitled *Rehabilitation Potential of Western Coal Lands*, the NAS concluded that in areas receiving over 10 inches of rain per year, the rehabilitation chances are fairly good, provided large sums of money are invested and rehabilitation efforts continue over a number of years. Sixty percent of the Western coal lands receive the necessary 10 inches of rainfall, these include the Ponderosa pine areas, the mountain shrub areas, and the high grasslands. In the Southwest desert lands where annual rainfall is below 10 inches, revegetation may not occur for centuries, no matter how extensive the reclamation efforts.<sup>4</sup>

The NAS report emphasizes the need for adequate planning, monitoring, enforcement, and financing to insure the highest degree of rehabilitation possible. Their recommendations read as follows:

1. We recommend that surface mining for coal should not be permitted on either public or private lands without the prior development of rehabilitation plans designed to minimize environmental impacts, to meet on- and off-site air and water pollution regulations, and to define a timetable for rehabilitation concurrent with mining operations. The pre-planning should be part of an original environmental impact analysis for the region and should clearly indicate the basis on which conditions at the proposed mine sites are evaluated. It is important that adequate provision for public participation be a part of the review of the preplans.
2. We recommend that minimum regulations governing the surface mining of coal be promptly established by Federal statute to provide for the planning, monitoring, enforcement, and financing of rehabilitation, and that the costs of these activities be financed by mining operations. We also recommend that rehabilitation management plans be made and enforced for a period sufficiently long to assure vegetative stability. *We recognize that state and local governments may also wish to impose further rehabilitation requirements to meet additional goals.* The sharing of the responsibilities for regulating surface mining and rehabilitation in this way should be encouraged. Methods for public participation at these several levels of government should be improved.
3. Rehabilitation of surface mines on public lands should set the example of the best available planning and the most rigorous application of rehabilitation techniques. Administrative regulations of the Federal land management agencies should go well beyond what is demanded by statute, if technology is available. Leases and permits for mining coal on Federal lands should be so written as to demand the application of the most advanced rehabilitation technology.

4. Improvement of rehabilitation techniques and the reduction of environmental impacts depend critically upon monitoring and evaluation. Therefore, we recommend establishment of a comprehensive, non-industry program to monitor and evaluate the rehabilitation of all current and future coal surface mining operations. Through such experience, performance standards for rehabilitation can be based on technical knowledge. The evidence must include a complete baseline inventory of the existing ecology, geology, and hydrology prior to granting a permit and the establishment of a set of continuing observations to monitor the on-site and off-site effects of mining and rehabilitation. Such studies must also include the determination of the chemical properties of the soils and overburden and the hydrologic effects of surface mining on ground water, surface drainage and water quality as affected both on-site and off-site. These data will be a necessary measure of what has been accomplished and serve as an essential guide for ongoing and future operations. The observations should be verified by agencies independent of the mining operation, because many years of objective observations are required and organizational continuity is essential.

5. Since mining and rehabilitation involve many diverse economic, ecologic, engineering, hydrologic, and social factors in complex inter-actions and feedback loops, we recommend that Federal research and development programs for coal include studies on total system approaches to energy resource mining, mined land rehabilitation, and energy conversion. Because rehabilitation depends on qualified people, we recommend that the responsible governmental agencies develop interdisciplinary teams to assess the potential for rehabilitation of proposed mine sites and to conduct the research for rehabilitation.

6. Certain features of the landscape cannot be restored at any price. If irreplaceable historic, scenic or archeological sites or endangered species are present in an area proposed for mineral exploration or surface mining, or if such values in a neighboring area would be irreparably damaged by such activity, no mining should take place without an extensive review of the consequences. In some cases artifacts may be salvaged or moved with minimal loss of their value to society. In those instances the salvage operation should be considered part of the cost of rehabilitation and charged against the mining operation. If such irreplaceable sites cannot be removed or protected, or if the landscape and associated biota cannot be rehabilitated for social purposes, surface mining should be prohibited.

7. Modern technology provides opportunities for changed uses and design of new landscapes in mined areas. Overburden is a resource for these activities, not a waste material. We recommend that regional planning for subsequent land uses, such as rangeland parks, recreational areas, and urban disposal center, take advantage of these opportunities.

8. The shortage of water is a major factor in planning for future development of coal reserves in the American West. Although we conclude that enough water is available for mining and rehabilitation at most sites, *not enough water exists for large scale conversion of coal to other energy forms (e.g., gasification or steam electric power)*. The potential environmental and social impacts of the use of this water for large scale energy conversion projects would exceed by far the anticipated impact of mining alone. We recommend that alternative locations be considered for energy conversion facilities, and that adequate evaluations be made of the options (including rehabilitation) for the various local uses of the available water.<sup>5</sup>

In most Western states coal seams are conduits for underground water flow. Strip mining operations will inevitably intersect the aquifer causing drastic alterations in the underground water flow patterns. The water system may flow far underground causing wells to dry up, leaving reclaimed areas and surrounding agricultural lands too dry to support native vegetation.

Surface mining will also cause alterations in the surface water flow patterns. Stream channels and alluvial valley floors which carry surface water will be destroyed. The rechanneling of surface streams will cause heavy erosion, and alluvial valleys, once highly productive grazing areas, may dry up. It is, therefore, essential to stipulate in the planning of mining operations that alluvial valley floors and stream channels must be preserved.

Indian tribes who enter into strip mining agreements must be willing to sacrifice not only the lands to be mined, but also surrounding areas that may be dewatered as a result of the mining operations.

As of 1973, the rehabilitation efforts of the major coal companies leave much to be desired. Only 49% of all federal and Indian lands have been rehabilitated to meet USGS standards, which in many cases involves only the leveling off of the spoils banks. In terms of total unrehabilitated acres, Utah International is the worst offender with 986 acres left unrestored. An additional 1133 acres have been stripped, but the spoils banks have been recontoured to coincide with the original landscape. Out of these 1133 acres, only 100 acres have been reseeded. Of the 3772 acres of federally leased land, none have been reclaimed satisfactorily or permanently.<sup>8</sup>

The concern about the potential for vast environmental devastation caused by ill-planned and mismanaged strip mining operations prompted the Congress to pass the Surface Mining Control and Reclamation Act of 1977 which created the Office of Surface Mining. Section 710 of this act mandated a study be done of surface mining and control on Indian lands. The Council of Energy Resource Tribes, under a contract with OSM, did this study and is currently preparing legislation to implement its recommendations. The CERT study came out strongly in favor of the tribe's regulating all mining and reclamation on their lands and receiving proper funding to do so.

Indian tribes must begin pressuring the BIA and the Interior Department to insure that federal and local strip mining laws are enforced. We cannot afford to be lax; we must take the initiative now to see that our lands are not needlessly destroyed. Bob Bailey, A Northern Cheyenne from Montana, says:

The question is, do we perpetuate ourselves or do we extinguish ourselves? The very land we stand on, sleep on, eat on, will be torn up. This is our last piece of land, and if we lose it, we'll be Indians without lands in the future.<sup>9</sup>

## ELECTRICITY AND COAL

Electricity is an essential and convenient energy source for American industries and consumers. Electricity is non-polluting, flexible, efficient in its end use, and easily transported. The demand for electricity for illumination, heating, and for running motors and appliances will increase rapidly as we approach the year 2000. At present, electricity makes up less than 10% of the total energy consumed in the U.S. Experts estimate this figure will rise to 50% by the year 2000. This rapid increase in the demand for electricity will greatly accelerate the pace of coal development in the West.

Currently, two-thirds of the coal mined in the U.S. is used to produce electricity. In October, 1971, the Bureau of Reclamation and 35 power companies released the "Northern Central Power Study," which located 42 potential sites for coal-fired power plants. Thirteen of the plants were to have a generating capacity of 10,000 megawatts. The study also identified sites for larger plants to be built by 1985, which would greatly increase the production of electricity and the demand for Western coal.

Two power plants are operating, and three more are under construction in the Southwest. The operating plants are the Four Corners facility in Fruitland, New Mexico and Southern California Edison's Mohave Plant. The spewing smokestacks of the Four Corners generating facility earned notoriety a few years back as the only manmade creation visible to the Apollo astronauts. These plants alone burn 12 million tons of coal each year.<sup>9</sup> The anticipated rapid growth of coal-fired electrical power plants will have a tremendous impact on the economy, water availability, and the environment in the Western states.

The major environmental drawback to coal-fired generators is the emission of sulfur dioxide, carbon monoxide, and small particle matter into the atmosphere. Air pollutants increase the severity of respiratory illnesses such as colds, sore throats, bronchitis, and pneumonia. Air pollution can also adversely effect livestock, agricultural crops, and property.

Standards for the control of air pollution were established under the 1970 Clean Air Act. Research has shown that the air quality in urban areas has improved in recent years due to federal and state cleanup efforts. However, President Ford, in his economic message in October, suggested that some "secondary" air quality standards may have to be suspended to facilitate the Administration's energy program, Project Independence.

In 1971, the Ford Foundation sponsored the Energy Policy Project, a comprehensive look at America's energy future. In their report released in November, 1974, they warned that "available scientific evidence indicates that there is no basis for relaxing present air quality standards."<sup>10</sup> The report calls for an immediate program to regulate the emission of small particles which today are largely uncontrolled, and may prove to be a greater hazard to human health than the sulfur and carbon pollutants. The Project's report calls for strict enforcement and regulation of air quality standards, pollution taxes levied against violators, and a national energy conservation program as the means to achieve air quality.

If coal-fired generators are to help meet our energy needs without causing irreparable harm to the environment, technology must be developed to minimize the proliferation of sulfur dioxide and small particles into the atmosphere. A new process, flue gas desulfurization (FGD), has been developed which may, to a large extent, solve the sulfur dioxide and particle pollution problem.

The system, commonly known as the scrubber, has raised much controversy. The Chairman of the Tennessee Valley Authority stated in early 1974:

The country's knowledge of scrubbers has not yet progressed to the point where TVA can have any degree of assurance that it is not buying a billion dollar pig in a poke.<sup>11</sup>

The Environmental Protection Agency, in an effort to assess the status of sulfur dioxide control, held hearings on FGD technology in October, 1973. The main findings emerging from the hearings were:

- Flue gas desulfurization (FGD) technology must be installed on large numbers of power plants if sulfur dioxide emission requirements adopted pursuant to the Clean Air Act are to be met in the 1970's . . .
- With several noteworthy exceptions, the electric utility industry has not aggressively sought out solutions to the problems they argue exist with FGD technology . . .
- Although most utility witnesses testified that FGD technology was unreliable, that it created a difficult sludge disposal problem, and that it cost too much, the hearing panel finds, on the basis of utility and vendor testimony, that the alleged problems can be, and have been, solved at a reasonable cost. The reliability of both throwaway-product and saleable-product FGD systems has been sufficiently demonstrated on full scale units to warrant widespread commitments to FGD systems for sulfur dioxide control at coal and oil fired power plants . . .<sup>12</sup>

Alexander Weir Jr., principle scientist for air quality of Southern California Edison Co., recently obtained an exclusive license to sell stack-gas scrubber systems he developed. A large-scale unit of the Weir system has been operating successfully for nine months at the Mohave generating facility in Nevada. The system has proven to be 95% effective in removing sulfur dioxide, and has effectively removed over 90% of the small particle matter. The solid wastes from the FGD system, essentially gypsum, can be used as a parking-lot filler, or can be used to make gypsum wallboard. The Philadelphia Electric Company has decided to install scrubber units in three of its generating plants at a cost of 68 million dollars. This expressed confidence in, and the preliminary success of, the scrubber system has done much to undermine the claims of the American Electric Power System that the scrubber is unproven, unreliable, and prohibitively costly.

The FEA report emphasizes the need for the installation of scrubber units if sulfur dioxide and particle matter pollution are to be controlled. Indian tribes interested in, and investing in, the power plant industry must secure firm guarantees that scrubber systems will be installed. With the development of coal-fired generating

facilities proceeding at an already near reckless pace, the need for the guaranteed installation of these units becomes all the more urgent.

A second method designed to alleviate the air pollution problems inherent in coal-fired electrical generation is the fluidized-bed boiler. In the fluid-bed system, chunks of coal are mixed with limestone in a bed, and the mixture is aerated from below, producing a bubbling fluid-like mass. The coal is then ignited, heating water-filled coils submerged in the bed. The water in the coils changes to steam which is used to run the electrical generators.

When the coal burns, oxides of sulfur are produced. The released sulfur reacts with the limestone to produce calcium sulfate, thus preventing its entry into the atmosphere. The firm Pope, Evans, and Robbins is under contract from the Office of Coal Research to design, construct, and operate a 30 megawatt coal-fired fluidized-bed boiler. The boiler will be the first large-scale fluid-bed boiler, and will, hopefully, demonstrate the fluidized-bed's capability to burn coal without emitting excessive amounts of sulfur dioxide and nitrogen oxide.

The fluidized-bed boiler has a second advantage over conventional coal-fired plants, that being efficiency. The rate of heat release per cubic foot of combustion space will be more than 10 times the heat release rate of conventional pulverized coal boilers. Augmented by the addition of a heat recovery system, the fluid-bed boiler system should approach efficiencies of 50%, as opposed to conventional boiler efficiency, 36%.<sup>13</sup>

Thus far only the air pollution problems incurred in coal-fired electrical generation have been discussed. The projected expansion of the coal-fired utility industry will also have a major impact on water availability and land use alternatives in the West. In order to avoid repetition, and to sketch a more comprehensive picture of energy development benefits and liabilities, these topics will be discussed in the following section on coal gasification.

## COAL GASIFICATION

With shortages of natural gas and liquid fuels becoming more acute, and with fossil fuel demand expected to double by the year 2000, extensive research and development is being done in coal gasification and coal liquification techniques. The production of clean gaseous and liquid fuels from coal, suitable for electrical power generation, transportation, and for residential and commercial use, will play a key role in meeting U.S. demands for the next 20 to 30 years. That is, until replenishable energy sources such as wind, geothermal, and solar energy are developed.

Basically, the coal gasification process involves the heating-of-coal in the presence of steam, whereby, the carbon in the coal reacts with the hydrogen in the steam to produce methane gas, the main component in natural gas. This process produces carbon monoxide and hydrogen as byproducts, which, through a process called methanation, react to produce more methane, thus increasing the concentration of methane in the synthetic gas.

If the energy shortage pushes the expansion and development of stripmining, coal gasification, and electrical power generation as far and as fast as present predictions indicate, the land and way of life of the Western Indians will be drastically altered. At present, some 20 billion tons of coal under nearly 1 million acres of public and Indian lands has been leased to private industry by the Interior Department. The Interior Department has leased these lands without adequate consideration of the environmental effects of stripmining, and without any assessment of the staggering impact coal development will have on the economy and society of the Western states. Currently, only 11% of these leases on public and Indian lands are producing coal, but as the

network of electrical generating facilities and coal gasification facilities expands, the increased demand for coal will result in the rapid development of Indian and public coal leases.

In 1964, a consortium of investors, publicly owned utilities, and government agencies was formed to plan, construct, and operate a coal-fired network of electrical generating facilities to serve the Southwest. The consortium, called WEST (Western Energy Supply and Transmission Associates), has built two power plants and has three more under construction. When all five plants are in operation, total coal consumption will exceed 30 million tons per year. In addition, huge quantities of water, an estimated 100,000 acre feet per year, will be needed to cool the generating equipment. Most of the water will be returned to the water supply between 10 and 15 degrees hotter. A small percentage of the water will be lost to evaporation.

Under the present development scenario, seven gasification plants will be built in the Southwest, each producing 250 million cubic feet of gas a day and consuming 8 million tons of coal and 20,000 acre feet of water a year - water which is lost in the gasification process and not returned to the ecosystem. If all seven gasification plants and all five generating facilities are in operation, they will collectively consume approximately 176 million tons of coal and 170,000 acre feet of water per year. To feed this monstrous energy network, over 100 square miles of Indian coal land will be strip mined over the next 15 years.

An energy network of even greater dimensions is being planned for the Northern Plains. The North Central Power Study located 42 potential sites for coal-fired generating facilities, with a total generating capacity of 50,000 megawatts to be in operation in the 1980's. In addition, the Northern Great Plains Resource Program calls for the construction of 7 gasification plants by 1985, and an additional 9 plants by the year 2000.

The enormity of the energy networks planned for the Southwest and the Northern Plains will, without doubt, cause irreparable disruptions in the lifestyle and lands of the American Indian. Coal development will necessitate the expansion of the railway system, highways, electrical power lines, sanitation facilities, water supply, law enforcement, housing, etc. Indian people must consider the staggering and irreversible consequences of large-scale coal development projects before entering into contract agreements. Coal development will have a major impact on:

## WATER

The projected scenarios for coal development that are currently under consideration will severely tax the water supply in the Western states. The National Academy of Sciences stresses that the water supply in Montana is "completely committed, perhaps overcommitted;" Wyoming's water supply is being heavily taxed; and the Colorado River Basin's water allocation is, without doubt, overcommitted. The Navajos have allocated two-thirds of their water allotment to coal development. *Science* reported the NAS findings, noting:

*there is simply not enough water in the Western states to permit the enormous congregations of coal-fired generating, gasification, and liquification plants envisioned in recent years by utilities and oil companies . . . any large-scale commitment of water to on-the-spot consumption of coal would lock such states as Montana, Wyoming, and the Dakotas into a coal based economy they hadn't bargained for.*<sup>14</sup> (emphasis added)

If Western water is going to be committed to coal development, agriculture, ranching, recreation and water for human needs will be in short supply. In essence, the whole economy and way of life in the West will be drastically changed. Are Indians willing to accept the consequences of large-scale coal development? Is this what Indian people want for themselves and for their children? The choice is yours. An equitable compromise on water use must be found, or the Western Indians will have no future, no means to survive. The time is now to secure Indian rights to water; delay will spell disaster for Indian people.

## SOIL AND AIR QUALITY

The soils of the Northern Plains and the Southwest are high in alkaline salts. These salts filter through the

topsoil and reach high concentrations in the subsoil. Surface mining disrupts the soil, causing the alkaline salts to surface polluting the soil and water supply. The higher salt concentration results in stunted or destroyed crops; streams and rivers become contaminated killing fish, wildlife, and livestock; and the salts can filter into wells causing human sickness.

Air pollution from the strip mines, coal-fired generators, gasification plants, and secondary industries will substantially degrade the clean air of the West. Even after the removal of 99.5% of the ash, sulfur dioxide, and small particle matter through the installation of scrubbers (a percentage by no means guaranteed), 100,000 tons of pollutants will enter the atmosphere each year by 1985, if power plants planned for the Northern Plains are in operation.

According to Environmental Defense Fund calculations, the air pollution that will result from development on such a scale will produce more air pollution than that which chokes the 9,219 square mile Los Angeles basin.<sup>25</sup>

The air pollution problem will be further aggravated by the increase in auto and truck traffic that will follow coal development.

The influx of people to plan, manage, and operate the coal industries will overstrain community housing, public facilities, and services, and schools, hospitals, sewage treatment facilities, and retail stores. The projected rapid growth of Western mining towns will far exceed urban planning and development, resulting in a chaotic and unmanageable habitat. *Simply stated, development of the coal industry at the pace planned by the coal industry is unmanageable, unnecessary, and ill-advised.* A young Hopi articulates the fears of all Western Indians.

You are taking our water. You are destroying our land . . . How can we live? It will be the end of our way of life, the end of the Hopi people.<sup>16</sup>

Indian tribes can regulate their own air quality. The Northern Cheyenne tribe was the first governmental entity to redesignate their reservation to Class I air quality. In so doing, the tribe has put itself in a position to protect its own air quality. This, in effect, will force developers in their area to install the best available equipment to control air pollution and could stop proposed development which would cause deterioration of their air quality.

## ECONOMY

Many Indian tribes, living in poverty and suffering from high unemployment and low-paying jobs, view coal development as their only chance to escape their persistent economic depression. The revenues generated by coal development are substantial and attractive, but the negative aspects: air pollution, water shortages, and the destruction of the land, must also be considered. While the income from coal development is substantial, so are the costs. Coal development will necessitate expansion of housing, roads, railways, schools, medical facilities, etc. Indian tribes will undoubtedly be called on to finance a considerable part of these expanded services.

Coal development will provide increased job opportunities to on-the-reservation Indians. However, the number of jobs, the types of jobs, and the pay scales are by no means guaranteed. Strip mining operations are highly automated, and therefore, will not generate many jobs. In electrification and gasification plants, many jobs will require extensive expertise, expertise Indians do not have. This problem can be remedied through apprenticeship programs organized and financed by the coal companies. To secure such training programs, contract agreements with the coal companies must be reached that will include such provisions.

The commitment of Indian lands, capital, and water resources to coal development will have an adverse effect on ranching and agriculture. Indians must be aware of the fact that coal development is a temporary enterprise; that coal supplies will run out; and that new energy sources will be developed that will decrease the need for coal-fired electrical generation, synthetic gas, and synthetic liquid fuels.

When coal is mined, capital assets are lost. When the coal industry leaves the reservation what will be left? Empty mines, closed industries, land ravaged by strip mining, polluted air, a critical shortage of clean water — these are the final consequences of large-scale coal development. This is what Indian people must ultimately understand. The Northern Cheyenne Landowners' Association feels that the

ultimate end of the Northern Cheyenne Reservation, the removal of its people, and the destruction of culture seems inevitable unless measures are taken now to control the planned mining of coal on the reservation.<sup>17</sup>

Rapid, random, and uncoordinated large-scale coal development in the West is both unnecessary and unacceptable. The nation has enough time and expertise to research and develop procedures and technologies that will minimize the adverse effects of surface mining, electrification, and coal gasification. A continuation of the current development schemes will result in the disruption of the land, people, and the environment on a scale which is neither acceptable nor tolerable.

### **INTERIOR DEPARTMENT, THE BIA AND LEASING**

The leasing of public and Indian lands is administered by the Interior Department and the Bureau of Indian Affairs. The authorization permitting the Interior Department to lease public lands is pursuant to the Mineral Leasing Act of 1920; the Omnibus Tribal Leasing Act of 1938 provides for the leasing of Indian lands under the auspices of the BIA. The leasing policy of the federal government has been a failure in every way. It has failed to encourage coal production; has failed to provide a fair market price for Indian and public coal through a combination of non-competitive bidding and a preference rights leasing policy, resulting in laughably low rental and royalty payments; and has failed to assess and minimize the environmental impact of strip mining and the related coal industries. The mismanaged and uncoordinated leasing policy has thus resulted in the exploitation of Indian and public resources and lands, all to the benefit of the coal industry.

Since the enactment of leasing legislation, the Interior has approved 463 leases on public lands covering over 680,000 acres, and leases on Indian lands totaling 259,000 acres. Of these 474 leases only 52, or 11%, are producing coal. The leasing policy of the Interior while purporting to be competitive, in reality, has not been. 59% of the Interior's leases have been awarded with only one bid submitted. Richard Bodman, Assistant Secretary of the Interior, has admitted, "leasing generally has been on the basis of industry expressions of interest."<sup>18</sup> The non-competitive leasing policy has resulted in ridiculously low returns for public and Indian coal: the public has received, on the average, only 12.5 cents per ton of coal, while Indians have fared slightly better, averaging 15.8¢ per ton. The few leases that have been granted through competitive bidding have yielded 11 times more revenue per acre in comparison to the non-competitive leases. An example: The Northern Cheyennes leased 16,000 acres of their land to Peabody Coal for 12 cents an acre. Just two years later, two sales in the same area drew six bidders each, and the winning bids approached 16 dollars per acre! Thus, the advantage of a competitive leasing system.

The lengthy adjustment period of federal leases has also contributed to the low revenues received for Indian and public coal. Public leases are adjusted every 20 years, while Indian leases are adjusted every 10 years. During the adjustment period there is no mechanism through which rent and royalty payments can be escalated to reflect increases in the market value of coal, or to compensate for rapidly rising land values. The inequity of the lease adjustment policy is evident in light of the fact that retail coal prices have increased 60% in 1974 alone.

The preference rights policy, a third factor which has institutionalized the non-competitive leasing practice, was included in the 1920 Mineral Leasing Act to stimulate industry funded mineral exploration in the Western states. Under this procedure, a corporation or individual is granted an exclusive right to explore a specified tract of land. And if minerals are found in sufficient quantities, the mining company has an exclusive option to lease the tract. The cost for an exploratory permit is 25¢ per acre per year, plus an initial filing charge of 10 dollars. The preference rights clause, while providing private capital for mineral exploration, also reinforces the non-

competitive nature of the federal leasing program. It is the position of critics of the preference rights system, that the value of the information received through exploratory permits does not adequately compensate for the low coal revenues resulting from the non-competitive bidding practice.

The minimal cost of obtaining and holding a preference rights lease, the Interior's policy of granting leases in response to industrial initiatives, regardless of market demands, and the non-competitive nature of the leasing policy has encouraged the coal companies to hold leases in speculation. That is, to not develop the lease in hopes of an increase in the market value of coal, or transferring the lease to another mining company at a profit. For these reasons, leasing has not served the interests of the Indian Community.

## INTERIOR DEPARTMENT AND ENVIRONMENTAL PROTECTION

There are three Interior Department regulations which are intended to assess and minimize the destruction of the environment due to strip mining. Section 5 of the standard lease form states that "REASONABLE STEPS" MUST BE TAKEN TO PREVENT THE "unnecessary" pollution of the air, water and land; 43 CFR 23 obligates the leaseholder to prepare exploratory and mining plans with the intent to minimize environmental disruption; and section 102 (2) (c) of the 1970 National Environmental Policy Act (NEPA) requires all federal agencies to prepare environmental impact statements to assess the potential environmental disruption of any federal action (leasing).<sup>19</sup> All these regulations have failed to achieve their intended purpose. The Interior never defined or established a regulating mechanism for section 5, thus it proved unenforceable. The CFR regulation was not made retroactive, and therefore applies to only 27 leases. And as before, the Interior never issued guidelines for the enforcement of the regulations. The Interior has ignored completely the environmental impact statement required pursuant to the NEPA of 1970. Of the 20 leases issued following the passage of the act, not one included the mandatory impact statement.

The BIA, a subdivision of the Interior Department, has also failed in its assigned task. That is, advising the Indian tribes in resource development planning and representing them in leasing negotiations with coal companies. The low revenues Indians receive for their coal and the lack of information made available to them with regard to the impact strip mining, coal gasification, and coal-fired generation has on water, air, and the land testifies to the failure of the BIA to represent the Indian community fairly, competently and righteously. Also, the BIA, being a subdivision of the Interior, is responsible to the Interior Department, and more specifically to the President, who is committed to domestic energy development.

In light of these facts: one, that coal development is a complex operation with a tremendous potential for devastation — cultural, economic, and environmental, and that the Interior Department and the BIA have continually failed to represent the Indian position equitably in resource development programs; there is an urgent need to provide the Indian community with the information, contacts, and available alternatives to leasing that are designed to help the Indian, and not fatten the coffers of American industry.

Decisions with regard to coal development cannot be made in a vacuum, and it is obvious that we cannot rely on the government to provide the kinds of information, consultation, and technical assistance that are critical in deciding and implementing a resource development program. It is the expressed purpose of AIO's resource development workshop to provide the information and access to reliable consultants that have been so lacking in the past, due to the ineptness of Washington's bureaucracy.

The organization of the Council of Energy Resource Tribes is a hopeful sign that the coal owning tribes will be able to control the development of resources. Since we began using this document in our early seminars on Indian control of Indian resources, several tribes have been involved in highly complex negotiations for coal development. The trend of "standard lease form" development seems to have been stopped. The negotiation of the agreement is only the first step. Tribes must be constantly on guard to insure that they maintain control.

Coal development has the potential for providing coal owning tribes with a new lease on life if it is developed in a way that is economically, environmentally, and culturally sound. Or it could bring death - to the economy, to the environment, to the culture and thus the people.

<sup>1</sup>James Cannon, *Leased and Lost*, New York: Economic Priorities Report, 1974, pg. 1

<sup>2</sup>*Exploring Energy Choices*, Energy Policy Project of the Ford Foundation, Cambridge, Mass.: Ballinger Publishing Co., 1974, pg. 39

<sup>3</sup>Thadis W. Box *Rehabilitation Potential of Western Coal Lands*, Cambridge, Mass.: Ballinger Publishing Co., 1974, pg. 51

<sup>4</sup>*Leased and Lost*, pg. 8.

<sup>5</sup>*Rehabilitation Potential of Western Coal Lands*, pg. 4-5.

<sup>6</sup>*Leased and Lost*, pg. 27.

<sup>7</sup>*Ibid.* pg. 8.

<sup>8</sup>*Ibid.*

<sup>9</sup>*Ibid.* pg. 13

<sup>10</sup>*A Time to Choose*, Energy Policy Project of the Ford Foundation, Cambridge, Mass.: Ballinger Publishing Co., 1974, pg. 190.

<sup>11</sup>*Ibid.* pg. 192

<sup>12</sup>*Ibid.* pg. 193.

<sup>13</sup>*Clean Energy from Coal Technology*, Office of Coal Research: United States Department of the Interior, 1974, pg. 23

<sup>14</sup>*Leased and Lost*, pg. 16

<sup>15</sup>*Ibid.* pg. 17

<sup>16</sup>*Ibid.* pg. 18

<sup>17</sup>*Ibid.* pg. 19.

<sup>18</sup>*Ibid.* pg. 22.

<sup>19</sup>*Ibid.* pg. 22.

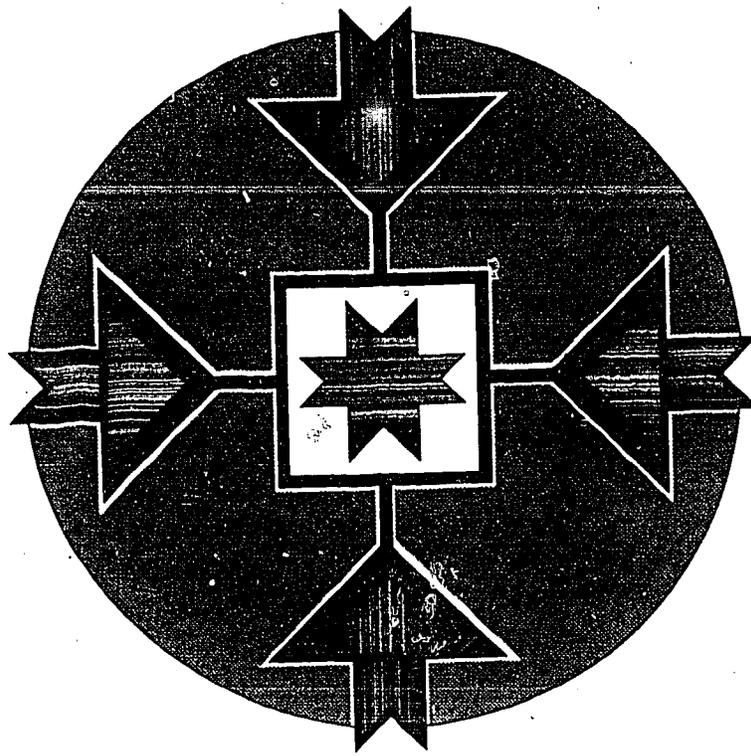
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4. Leigh Price, Environmental Protection Agency
5. James Ridgeway, Institute for Policy Studies
6. David Robinson, Northern Cheyenne Landowners Association
7. James Sawyer, Resources for the Future
8. Peter Sly, Environmental Law Institute



## CHAPTER 14 INDIAN URANIUM: PROFITS AND PERILS

By Richard Nafziger

### Section 1

Uranium, the essential ingredient for nuclear power generation, is one of the most valuable minerals in the world today.

The nuclear industry is very new, less than twenty-five years old, thus the search for and development of uranium is a relatively less advanced industry in the world of mining and minerals.

#### The Nuclear Fuel Cycle

The process of extracting and processing uranium so that it can be used as a fuel for nuclear reactors is known as the nuclear fuel cycle.

The goal of the fuel cycle is to produce a fuel which is fissionable. Fission is the splitting of two atoms resulting in the release of energy and other particles. In this process, the particles react with other atoms causing them to split, creating heat which when converted into steam turns a turbine-generator to produce electricity.

Currently, the nuclear industry operates systems which use a nuclear isotope\* known as U-235 as a fissionable fuel.

\*i-so-tope (i sə tōp), n. Chem. any of two or more forms of a chemical element, having the same number of protons in the nucleus and, hence, the same atomic number, but having different numbers of neutrons in the nucleus and, hence, different atomic weights. There are 275 isotopes of the eight stable elements in addition to over 800 radioactive isotopes, so that isotopic forms of every element are known. Isotopes of a single element possess almost identical properties. f. iso- m.s. Gk topos place i-so-top-ic (i-sa-topik), adj. (The American College Dictionary, Copyright 1970, p. 649)

Natural uranium contains a small percentage of U-235.(1%) The goal of the nuclear fuel cycle is to obtain a fuel which contains a higher percentage of U-235 (3%).

three principle phases:

1. *Preliminary investigation.* The collection of already existing geological data, satellite imagery (photographing areas from satellites), aerial photography, and hydrogeochemical sampling (sampling streams, water tables, etc. for the presence of uranium).

2. *Detailed geological study.* This involves airborne radiometric prospecting and mapping. The uranium in the ground is known to give off gamma rays that can be detected with geiger counters or scintillometers. Prospectors fly over the area with these electronic devices and attempt to pick up indications of these gamma rays. The effectiveness of these devices is limited by the depth of the uranium ore or the type of overburden under which the uranium lies. Other devices are used to monitor radon gas; radon gas is a radioactive element naturally produced from the uranium. These radon gas indications are picked up with scintillometer or sensitive film and locations are pinpointed from monitoring done at a surface level.

3. *Detailed physical exploration.* If these preliminary investigations indicate that the area being studied has potential mineable uranium reserves then the next phase of exploration will be undertaken. That is physical exploration involving drilling. This is the most expensive phase and it is not undertaken unless the initial phases indicate the presence of uranium. Holes are drilled into the ground and measurements and tests are done on materials brought up from various depths.

Data from the drilling will indicate the uranium ( $U_3O_8$ ) content in the ore, and the size and depth of the orebody. From these factors, the value of the orebody can be determined. Considerations that need to be made in order to identify the value include:

1. *Grade of Orebody.* Natural uranium is found in varying concentrations in the ore. In the United States in 1976, the average uranium content of ore mined was .15%; in 1975, .17%; and in 1974, .18%. If the ore is found to be much lower in concentration, let's say at .05% (or one pound of uranium per ton of ore), it is probably too expensive to mine and development will be ruled out for the time being. An orebody which contains an average higher uranium content, for instance .80% of ( $U_3O_8$ ), is less expensive to mine.

2. *Size of Orebody.* The orebody must also be large enough that sufficient uranium can be extracted to pay for the costs of development and construction. The larger the orebody, the less expensive it is to mine. Even though a particular deposit may be low in uranium content, if it is quite large, it may prove economical to mine.

3. *Depth of Orebody.* The depth of an orebody indicates whether it is possible to mine and cost of mining. Orebodies on or close to the surface can be stripped, which is a relatively less expensive process. More expensive is the processing of deeper orebodies which must be mined underground. Lower grade uranium can be extracted from open pit mines while underground mines may require higher grade ores to justify the costs. The same situation is true with the size of orebodies. Smaller orebodies can be strip-mined while underground mining would be too expensive.

Once the specific geological value of the orebody has been determined, the company's mining economists will determine what the rate of profitability will be over the life of the mine. The cost of mining is computed and compared to the projected price of uranium over the life of the mine and from that data, the company can compute the rate of profit it can make from the operation. That is done by computing the rate of interest the company would be able to take on that particular uranium project calculated for the life of the mine. This method of computation is known as *discounted rate of cash flow* (DCF).

Using DCF analysis an investor would estimate:

a. Cost of constructing the mine.

- b. The quantity of uranium which could be produced each year.
- c. The projected price of uranium for each year the mine would be in operation.
- d. The costs of operating the mine.

Then for each year which money is spent putting the mine into operation an opportunity cost is added to actual expenditures to account for the fact that the investor lost the opportunity to invest those funds in some other project and receive a return on the investment. For each year money is spent the cash investment is discounted at a certain rate which reflects the declining value of the dollar due to inflation and the loss of opportunity to make other investments with those funds.

The company will analyze all of these costs and returns by computer using a series of hypothetical or comparable orebodies as a standard.

If the orebody is determined to be minable, the mining stage begins. Uranium in most of the United States is mined pretty much like coal with large open pit mines or underground shaft mines; however, other methods are used elsewhere. In South Africa, it is extracted from gold ore in the gold mining process. In Florida, one firm is mining it as a by-product of phosphate.

After mining, the processing stages are undertaken to convert the uranium ore into a nuclear fuel. The first step is *milling*. Milling is the process to refine the uranium ore which contains about .2% uranium ( $U_3O_8$ ), into *yellowcake*, which is 80-83%  $U_3O_8$ . Mills are usually located adjacent to the mine or within a short distance because of the expense of transporting huge quantities of unrefined ore. The mills are generally owned by the same companies who operate the mines. After milling, the yellowcake ( $U_3O_8$ ) is sold to either utilities, fabricators, or agents. The product sold on the market is yellowcake. It is the product for which uranium reserve owners receive royalties. The quoted price of uranium is the price of yellowcake. Sixty-eight percent of the 1974 yellowcake was sold to utilities and 32% was sold to fabricators and agents. After purchasing the yellowcake, these companies will transport it to one of the two existing *uranium hexafluoride processing plants*. The plants owned by Kerr-McGee and Allied Chemical are paid by yellowcake owners to convert it to a gas called Uranium Hexafluoride ( $UF_6$ ).

The  $UF_6$  is then transported to Enrichment Plants. Enrichment is the process where the percentage of the actual fissile or fission fuel U-235 is increased within the  $UF_6$ . Because enrichment is a process by which nuclear weapons can be made, all enrichment is controlled by the United States government. Following this process, the enriched materials are transported to fabrication companies which convert the enriched  $UF_6$  into pellets which are then placed into long metal tubes which form the fuel assembly in the nuclear reactor. The reactors are then assembled within nuclear power plants and used to generate electricity.

The enriched uranium fuel still contains valuable quantities of unburned uranium-235 after it is used in nuclear generators. In the past, government and nuclear industry decision-makers had planned to reprocess the fuel to recover the remaining uranium-235. There are, as of yet, no fuel reprocessing plants in operation and plans for the construction of such plants by General Electric and Allied General Nuclear Services appear to have been abandoned for economic reasons.

If the fuel is not reprocessed or if it is finally spent then the waste must be stored in isolated areas. Nuclear fuel wastes are extremely dangerous. Their radioactive contamination is a potential hazard for thousands of years. There are three categories of waste.

1. *High-level wastes*: characterized by high radioactive content which requires long-term isolation under perpetual surveillance at storage sites.

2. *TRU (transuranium-contaminated) wastes*: solid materials which have been contaminated with long-lived radioactive substances such as plutonium.

3. *Low-level wastes*: residues or solutions from chemical processing such as rubble, wood, contaminated tools, etc.

Currently, high-level wastes are solidified and stored in federal repositories. These are not considered permanent as the federal government is now searching for suitable places where wastes can be safely stored for long periods of time. As of yet no determination has been made on location or type of storage facility.

Low level wastes are currently buried near the surface. The important steps in the nuclear fuel cycles which concern Indian uranium reserve owners are the exploration, mining, milling processes and the sales of yellowcake. All of the costs of mining and milling to produce the finished product, yellowcake, are costs which uranium owners must subtract from the final sales value or the market price to determine their share of the resulting profits.

Also important is the number of nuclear reactors being built, already built or planned. This determines how much uranium will be needed and thus determines the *demand for uranium*. The greater the demand, the more vital Indian uranium is to the industry.

### The Concept of Uranium Reserves

In the following section, we will be looking at the *Indian Uranium Supply* in the context of global and national uranium reserves. A "known reserve" is generally considered to be an area which is economically feasible for production. Increases in demand and resulting higher prices or development of a cheaper more efficient technology for processing may mean that an area not previously economically feasible is added to "known reserves." Decreases in demand or increased production costs (higher wages, transportation costs) may cause an area previously included in "known reserves" to be deleted because it is no longer economically feasible for production. Mining firms which have the most detailed information on available uranium are often unwilling to disclose their knowledge. One has to use the reserve data released by mining companies and government exploration agencies since these are the only entities who have the money to find the uranium and disseminate the information. Under these conditions, it is possible for these entities to manipulate their findings for political/economic reasons. The recent accusations that companies may have tried to hide the true extent of their natural gas reserves in order to raise prices and push for natural gas de-regulation is a case in point. There is some evidence that some uranium corporations are doing the same thing in order to raise uranium prices.

In the case of Indian uranium, there is a possibility that information about uranium exploration findings may have been manipulated in order to prevent the tribes from realizing the true value and extent of their reserves. Companies often withhold information that they have which indicates the extent or existence of reserves until after they negotiate a lease or until economic conditions warrant. Neither the federal government, as trustee, nor the tribe itself has the capability of questioning their reserve data.

Realizing these limitations, the term "reserves" indicates that an orebody has been identified which has proven size and content which can be mined when needed. The term does not tell you how much uranium there is under the earth, but rather how much is positively known to exist at the given time. Since it is costly to investigate an orebody to the extent where one can tell it exists as a mineable reserve, companies and governments do not spend money to identify reserves until they are needed. Usually, there are enough reserves identified to last 25 years. But in those 25 years, additional reserves will have been discovered which will probably last another 25 years and so on.

Government data collectors usually describe reserves in two ways:

1. *Cost categories* indicate how much uranium is available at certain costs of mining. This determination allows one to see how much uranium is available at a particular time. If the price of uranium is low, only low cost uranium can be mined. If the price goes up, considerably more uranium will be available.

2. *Known and potential reserves* indicate the certainty of the uranium existing in minable quantities. Known reserves are those proved to exist. Less is known about potential reserves; therefore, the data concerning their existence is more uncertain.

## INDIAN URANIUM IN A WORLD CONTEXT

### Section 2

All of the statistics on reserves in the following section are those released by governments or industries. Remember, political and economic factors could make their validity questionable.

Table 1  
**WORLD URANIUM RESERVE OWNERS<sup>1</sup>**  
 Reserves available with mining cost of \$15 per lb. or less in 1975

Nations	% of World Total	
	Tons of U <sub>3</sub> O <sub>8</sub>	Total
United States (not including Indian lands)	364,660	25.0%
Australia (includes aboriginal lands)	360,000	24.6%
South Africa (includes Namibia)	262,000	17.9%
Canada (includes native lands)	187,000	12.8%
American Indian	55,340	4.0%
Niger	52,000	3.7%
France	48,000	3.3%
Algeria	36,000	2.5%
Gabon	26,000	1.8%
Spain	13,000	0.8%
All others	54,000	3.7%
<b>TOTAL</b>	<b>1,460,000</b>	<b>100.0%</b>

Uranium reserves on Indian lands are considerable and make up a significant portion of the world's total known reserves.

As a single nation, American Indian uranium tribes are the fifth leading uranium owners in the world (Table 1). As producers Indian tribes are the fourth leading producer in the world, producing 11% of the world uranium needs in 1976 (Table 2). Since 1948, 53,835 tons of uranium have been produced from Indian lands, which is 10% of total cumulative world production. Other less definite data indicates that tribes may own up to 55% of U.S. reserves.<sup>2</sup>

Table 2  
**WORLD URANIUM PRODUCTION<sup>3</sup>**  
 (In tons of U<sub>3</sub>O<sub>8</sub> 1976)

	Tons U <sub>3</sub> O <sub>8</sub> Produced	% of World Total
1 United States (not including Indian lands)	9,700	33%
2 Canada	6,250	21%
3 South Africa	4,000 (est.)	14%
4 American Indian	3,000	11%
5 France	2,680	9%
6 Niger	2,000 (est.)	7%
7 Gabon	900 (est.)	3%
8 Australia	470	2%
9 Spain	200	.5%
10 Portugal	110	.3%
11 Argentina	80	.2%
<b>Total</b>	<b>29,390</b>	

Tables One and Two indicate that almost all reserves and production is on the lands of developed nations or colonies. This situation is not true with most other minerals or energy resources and this is not a coincidence. Many experts believe that a similar exploration effort in less developed nations would create like results.

In the case of most minerals (and many other raw materials) the need of U.S. based multinational corporations to control all potential sources of supply in order to insure that there was not outside competition for their domestic supplies, had prompted these companies to seek and control materials overseas. Additionally, the high grade ores and colonial governments assured companies of tremendous profits.

This system of domination and control worked fine when underdeveloped nations were colonized and willing to accept the domination of their economies by outside corporations. However, in the 1960's, more and more nations began to demand control and ownership with reserves and mining on their lands. In response, mining corporations began to be less involved in development in these nations and began to concentrate their efforts in western developed nations which are safe from such actions as cartels, nationalization or greater government control over operations. Since uranium exploration and development is a new phenomena and uranium developers are not eager to confront the same problems other earlier developers had, they have engaged in exploration only in safe areas.

Over 80% of all Australia's uranium reserves lie on aboriginal lands. Aboriginal people were conquered and consequently pushed into reservations in the least desirable areas of the nation. It is these areas which have been found to be uranium rich. The largest uranium reserve in the world, Jabiluka, is on the aboriginal lands. Several other major deposits, Mary Kathleen and Ranger (second largest Australian uranium deposit) are also on aboriginal lands.

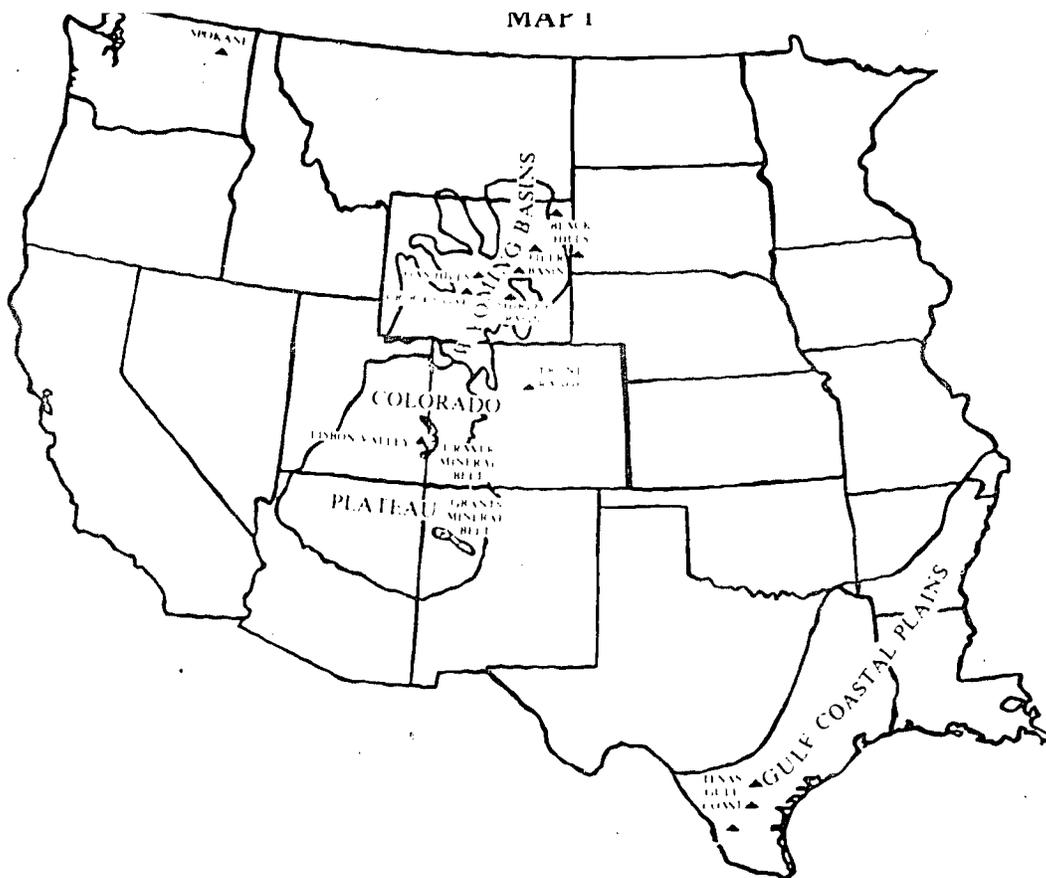
Australia may have the largest resources of uranium ore; however, the development and production of uranium is uncertain. Labor unions have taken a stand against development for environmental and safety reasons and environmental groups have created citizen resistance to development. The Australian government also wishes to control the development of the mineral and insure that if development does take place, it will be done by Australians.

In Canada, where there are 2,000 Indian reserves encompassing 6 million acres, uranium exploration has been intensive near native lands and on Native Claims Areas in Northern Saskatchewan in Northwest Territories. There also have been exploration activities on Native reserves in Ontario.

South African reserves and future production is dependent upon its control over its illegally held colony, Namibia. The Rossing mine, currently under development, will produce the vast majority of South Africa's uranium. However, Namibian people are struggling to gain control over their nation and its resources, thus threatening to disrupt South Africa's colonial control. Much of the current struggle in Africa is over the control of resources such as uranium. The western block nations wish to assure these resources are controlled and used by them while African people are struggling to regain control of their land and resources.

The vast majority of the uranium reserves controlled by France come from Niger and Gabon, who are still economic colonies of the former motherland. According to International attorney Charles Lipton, "The only agreements worse than those entered into by Indian tribes are in the French speaking African Countries. The government for investment in their (uranium) mines. That's about the worst deal there is."<sup>4</sup>

Clearly, a large percentage of uranium production and resources are exploited from either internal or external colonies of a few western nations.



Twenty-five percent of all United States uranium production (3,000 tons of  $U_3O_8$ ) was produced from Indian lands in 1976.<sup>6</sup> American Indian lands are known to contain from 13-45% of all United States Reserves.

Table 3 outlines reserves and potential reserves. When reading Table 3, remember that cutoff costs indicate the cost of mining a pound of uranium. Known reserves indicate that the uranium has been proven to exist by drilling or other direct sampling methods. The categories; *probable*, *possible*, and *speculative* reserves all indicate potential reserves which are incompletely defined or undiscovered. *Probable* indicates potential uranium which is likely to occur in known uranium districts. *Possible* uranium reserves are ones less likely estimated to occur in undiscovered or partly defined deposits near uranium producing districts. *Speculative* reserves are those thought to be in areas not previously productive.

The majority of uranium reserves and production from Indian lands is located within the Grants Uranium Belt, the largest producing area in the world. Fifty percent of all the land within the belt is Indian land. The land includes part of the Navajo Reservation, Navajo allotted lands, Laguna Pueblo, Ramah Navajo, Canonicito Navajo, Jemez Pueblo, Zia Pueblo, and Zuni Pueblo. Only the Navajo and Laguna Pueblo have leased land for exploration and development. Six hundred and eighty-six thousand acres of Laguna land have been leased to uranium companies. Fourteen companies account for the leases: Anaconda Copper, Continental Oil (Conoco), Exxon, Grace Oil, Gulf Oil, Hydro-Nuclear, Kerr-McGee, Mobil Oil, Pioneer Nuclear, United Nuclear, Western Nuclear, and Phillips Petroleum.<sup>7</sup> There is a strong evidence that extensive reserves are also located on Jemez and Zia Pueblo.<sup>8</sup>

## INDIAN URANIUM IN THE NATIONAL CONTEXT

### Section 3

Most of the uranium reserves and production centers in the United States are located in two major areas, the Colorado Plateau and the Wyoming Basin. The Colorado Plateau includes the Grants Uranium Belt, which is the largest uranium producing area in the world — (See map 1). Other occurrences are found in Karnes and Live Oak Counties in Texas and Northeast Washington. Map 1, and Tables 3 and 4 pinpoint the major production and reserve locations

## United States and Indian Uranium Resources

**\$15 per pound or less - cut off cost**

	U.S. Total	Indian	Indian % of U.S.
Known	430,000	55,340	13%
Probable	655,000	50,300	8%
Possible	675,000	111,300	16.5%
Speculative	290,000	18,700	6.5%

**\$30 per pound or less - cut off cost**

	U.S. Total	Indian	Indian % of U.S.
Known	640,000	80,670	13%
Probable	1,060,000	76,300	7.2%
Possible	1,270,000	161,400	13%
Speculative	590,000	31,200	5%

### Operating, Planned and Potential Uranium Ventures in Indian Lands in the Grants Uranium Belt\*

Location	Operating Mine	Company
<i>Laguna Pueblo</i>	<i>Jackpile-Paquate</i>	<i>Anaconda</i>
<p>Consists of two mines: an underground and an open-pit, which is the largest open-pit in the world. Annual production is estimated at 25,000 tons of ore per day or 2,500 tons of U<sub>3</sub>O<sub>8</sub> per year. Currently, one of the world's largest uranium operations, this particular mine will be exhausted by 1985.</p>		
<i>Churchrock, Navajo Nation</i>	<i>Churchrock 1</i>	<i>Kerr-McGee</i>
<p>Produces 900 tons of ore per day or 650 tons of U<sub>3</sub>O<sub>8</sub> per year.</p>		

Location	Planned Mine	Company
<i>Churchrock, Navajo Nation</i>	<i>Churchrock 2 &amp; 3</i>	<i>Kerr-McGee</i>

These two mines are also expected to produce 900 tons of ore per day. The three mines' total will produce around 1,800 tons of U<sub>3</sub>O<sub>8</sub> per year, operating will begin in 1980.

<i>Laguna Pueblo</i>		<i>Anaconda</i>
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Anaconda is developing another open-pit mine on the Pueblo which will produce approximately 2,000 tons of ore per day or approximately 1,300 tons of U<sub>3</sub>O<sub>8</sub> per year.

<i>Mariano Lane, Navajo</i>	<i>Mariano Lake Mine</i>	<i>Gulf Oil</i>
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The mine, which will be on the lands of three Navajo allottees, is expected to produce 600 tons of ore per day, or 400 tons of U<sub>3</sub>O<sub>8</sub> per year.

<b>Location</b>	<b>Company</b>
<i>Laguna Pueblo</i>	<i>Continental Oil</i>
Continental has leased a 6,500 acre tract where it hopes to develop 2 mines by 1980.	
<i>Navajo Nation, Shiprock</i>	<i>Exxon Corporation</i>
Exxon has leased 400,000 acres of Navajo lands under a possible joint venture arrangement. A very rough preliminary guess indicates that there may be as much as 100 million pounds of uranium. They estimate that they will find four deposits, each with a production life of nine years, resulting in a possible production of 6,000 tons of ore per day, or 3,500 tons of U <sub>3</sub> O <sub>8</sub> per year. To process the ore, it is assumed that two mills will be built. The lease has just entered the exploration state.	
<i>Ute-Mountain Nation</i>	<i>Mobil Oil</i>
Mobil has leased 162,176 acres of land here where a preliminary rough guess indicates that presence of 20 million tons of .20% U <sub>3</sub> O <sub>8</sub> ore recoverable at 50% mine efficiency or 40 million pounds of recoverable U <sub>3</sub> O <sub>8</sub> .	
<i>Navajo, Churchrock</i>	<i>United Nuclear</i>
Current drilling efforts indicate that they may be producing from a 1,000 tons per day mine by the 1980's.	
<i>Navajo, Crownpoint</i>	<i>Mobil Oil</i>
Drilling results indicate that there may be two mines of 600 tons per day capacity in production by the early 1980's. The lease consists of several Navajo allotments.	

**Table 4**  
**Uranium Leases on Indian Lands within the Grants Mineral Belt**  
 (Most have not produced evidence of Uranium)<sup>10</sup>

<i>Company</i>	<b>Number of Leases</b>		<i>Acres (approximate)</i>
	<i>Laguna Pueblo</i>	<i>Navajo</i>	
Anaconda	2		7,600
Continental Oil	4		6,500
		<i>Navajo</i>	
Mobil Oil		15	37,000
Kerr-McGee		13	25,000
Continental Oil		13	22,000
Gulf Oil		11	21,000
United Nuclear		18	20,000
Anaconda		6	12,000
Marathon Oil		2	5,000
Humble Oil		1	2,500
Ranchers Exploration		1	1,300
		<i>Navajo Allotted (all leases are 160 acres)</i>	
Mobil Oil		80	12,800
Michael P. Grace		72	11,520
Gulf Oil		66	10,560
Kerr-McGee		16	2,560
Continental Oil		15	2,400
Exxon		8	1,280
Homestake Mining		6	1,000
Hydro Nuclear		2	320



A. Sanoneto and Navajo area - 62,000 acres (interest in leasing expressed by a number of companies).

B. Jemez and Zia Pueblos - 78,000 acres (Interest expressed by a number of companies).<sup>11</sup>

Acoma Pueblo is also known to have considerable uranium reserves; however, much of the reserve lies under the city of Acoma which would force many people to relocate and untold expense. The tribe wishes to have a thorough understanding of impacts before developing.

#### Uranium Mining and Exploration Near Indian Lands

Regardless of their decision to develop or not, the existence of massive development in the area will affect all tribes.

The major development on non-Indian lands is an area known as Lake Ambrosia. This area just north of Grants is southeast of the Navajo reservation and very close to Acoma, Laguna, and Zia Pueblos. Kerr-McGee operates eleven mines, United Nuclear seven, Ranchers Exploration one, and Homestake Mining four. Ten miles east of the Navajo Reservation at Crownpoint, Phillips Petroleum and a Tennessee Valley Authority/Mobil Oil joint venture are developing major mines. Five miles north of Laguna in the Cebolleta-Bibo area, a Standard Oil of Ohio and Reserve Oil and Minerals joint venture is developing a mine and mill operation which produce 1,000 tons of ore per day. In that same area Exxon may be developing three mines and possibly a mill. Next to Lake Ambrosia, on Mount Taylor, Gulf Oil is developing a large mine-mill complex, known as the Rabbit Mine. It will be the largest and deepest mine in the United States. Out of the Grants Mineral Belt, but in the area, Union Carbide is planning a mining complex 25 miles northeast of Albuquerque. The development will border San Felipe and Santo Domingo Pueblos.

All of the mills presently in operation as well as those planned or under construction are located on private lands adjacent to Indian lands.

In February, 1977, twelve companies were exploring for uranium in the area and ten companies were delineating and developing discoveries. These include Anaconda (at Laguna), Atlantic-Richfield, Conoco, Exxon (near Laguna), Frontier Mining, Gulf Oil, Homestake Mining, Kerr-McGee, Utah International, Movi, Mobil Oil, Phillips Petroleum, Pioneer Nuclear, Ranchers Exploration, Reserve Oil and Minerals, Teton, United Nuclear, and Western Nuclear. The most active companies appear to be Mobil Oil, Conoco, Kerr-McGee, Phillips Petroleum, and Exxon.<sup>12</sup>

Although much of the development may not be on Indian land, massive development in the Grants Mineral Belt will affect more than the actual mining sites involved. The effect will be felt by the entire region. Total development today includes five uranium mills and 40 mines. It is expected that by 1990, production will triple. Even though the impacts of the kind of development are profound no attempt has been made to assess the impact of development on the entire area. The end result is that many tribes will be paying the costs of development; boom growth, deteriorating water and air quality and a massive influx of outsiders to the area, while gaining none of the benefits of development. For example, the tribal governments of San Felipe and Santo Domingo Pueblo were not consulted in any manner about the proposed Union Carbide mine which would border both pueblos. In fact, the councils were unaware of the development until they read about it in the newspaper. Although all uranium development in the Grants Uranium Belt will have a tremendous effect on the tribes they currently have no input into the evaluation process of these projects.

The Wyoming Basin is the second largest uranium producing area in the United States. There is a greater exploration effort in this area than elsewhere; 34 ½% of all exploration (surface drilling) was done in the Wyoming Basin. 32.5% in the Grants Uranium Belt.<sup>13</sup>

There is only one Indian reservation within the Basin, the Wind River Reservation, and as of yet there has been no production or development there. Exxon has been actively engaged in drilling there, where it has a 50,000 acre lease where preliminary exploration has indicated commercial uranium resources. The largest producing areas (see map 1) are Shirley Basin, Crook Gap, and Gas Hills Districts. Exxon operates the largest mine in the area, a 2,800 ton per day ore pit 20 miles northwest of Highland, Wyoming. Utah International operates two large 2,000 tons per day mines in the Shirley Basin; the Shirley Basin Mine and the Lucky Mc-Mine. Other major producers are Kerr-McGee at Shirley Basin, Union Carbide, United Nuclear and Federal Resources operating at Gas Hills and Western Nuclear operating at Crook Gap. Union Oil is planning a large 3,000 ton per day mine mill complex at Sweetwater County, Wyoming. Major reserve owners include Getty Oil, Gulf Oil, Exxon and Utah International.

Production in Texas has been dominated by solution mining. This involves injecting an alkaline solution into the uranium ore body. The solution migrates through the zone taking the  $U_3O_8$  into the solution and is then recovered by pumping the solution out through a production well. Five companies have been doing this in Southern Texas: A U.S. Steel Niagara Mohawk Electric Joint Venture, Wyoming Minerals, U.S. Steel, Union Carbide, and Atlantic Richfield. Their combined production has been about 500 tons of  $U_3O_8$  per year on about half of Texas's production. Continental Oil (Conoco) and Exxon operate open-pit mines in the state.

There also appears to be a boom in Arizona and Colorado where low grade reserves may be mined as price goes up. Reserves have recently been discovered in North Carolina in Pisgah National Forest, and there are indications of reserves in Northern Michigan, Minnesota, and Wisconsin.

One of the fastest growing areas in terms of exploration is northeast Washington. Over 20 companies are now involved in exploration in the area, mostly on or near the Colville and Spokane reservations. There are two developments on the Spokane Reservation. In operation is the mine mill complex owned by Newmont Mining's subsidiary, Dawn Mining. Phelps Dodge's subsidiary Western Nuclear is now constructing a large mine mill complex near Wellpinit on the Spokane Reservation. The mine is expected to produce 8 million pounds of uranium over a 10.6 year period. This will equal 3% of U.S. production for each year it is in operation. The mine will be low cost since the ore is a very high grade, .88% (about 5 times the average).<sup>14</sup>

### Exploration

Currently, the Bureau of Mines and the Bureau of Indian Affairs are working together to do a mineral evaluation of Indian lands. This is the first time that such an effort has been undertaken clearly pointing out that in the past, tribes have been negotiating agreements with little or no information. The survey involves 15 reservations and is a three step process. In step one, existing data will be gathered together and synthesized into planning programs. Step two will involve a reconnaissance field study program using geological mapping, geochemical prospecting, airborne geophysical surveys, aerial radiometric surveys, and various remote-sensing methods. Step three includes core drilling, extensive lab work, chemical analysis, isotope analysis, and modeling.<sup>15</sup>

The mineral evaluation has been heavily criticized by tribes. In a September 1976, meeting of the Council of Energy Resource Tribes it was brought out that only one of the 23 tribes were even aware that their reservations were included in the inventory. The one chairman who was informed about the existence of the program stated that the program is nothing but a "windshield inventory." (Bureau officials just drive around the reservation in pickup trucks). The study is hardly a timely effort, as the drilling will not be completed until 1992. Many tribal decision-makers have questioned the competence of those involved in the program. At a December 1976, AIO minerals seminar, a geologist from one tribe claimed that the Bureau's inventory that was completed under step one, didn't even include minerals that were currently being mined on the reservation.<sup>16</sup>

The Federal Government through the Energy Research and Development Administration (now a part of the Department of Energy) has established a comprehensive national program to evaluate uranium resources and to identify areas favorable for uranium exploration.

The program, The National Uranium Resources Evaluation, has been developed primarily to "develop new information to stimulate and assist industry in exploration for uranium in the United States."

1. Aerial reconnaissance surveys of all strategic areas.
2. Water sampling of surface and ground waters.
3. Geological investigations of surface and sub-surface areas. In the future this may include extensive drilling.
4. Technology development for new production and exploration techniques and also some new methods of producing ore.<sup>17</sup>

The NURE program includes evaluations of Indian lands. Aerial radiometric surveys and hydrochemical surveys are currently being done on Indian lands. All findings are to be made available to the public at request.

There is some concern as to whether the NURE program is working closely enough with the tribes to make the information they have collected useful to tribal decision-makers. Although NURE has been very consistent about passing on findings to mining companies, there is some doubt as to whether they have shared their findings with tribes who are affected. It appears that NURE has not recognized the fact that tribes are producers as well as owners of uranium.

The rising price of uranium has prompted companies to increase their exploration efforts (Figure 1, and Table 5 summarize recent exploration rates). The amount of exploration measured in the amount of drilling in feet, has increased from 14 million feet (m.f.) in 1973 to 23 m.f. in 1975. In 1976, the rate of exploration increased 37% to 34.8 m.f. Future plans forecast by industry call for 49.4 m.f. in 1977, or another increase of 41%.<sup>18</sup>

As one can see from Figure 1, the increased amount of drilling has resulted in an increased amount of uranium reserves. However, the amount of uranium discovered per foot drilled is consistently decreasing. That means that more and more exploration will be needed to discover the same amount of uranium that was discovered in the past. Table 5 summarizes the amount of uranium discovered per foot drilled. The reason for this consistent decline in uranium discovered per foot is that as deposits are discovered it becomes more and more difficult to find new ones as the largest and easiest to find are discovered first.

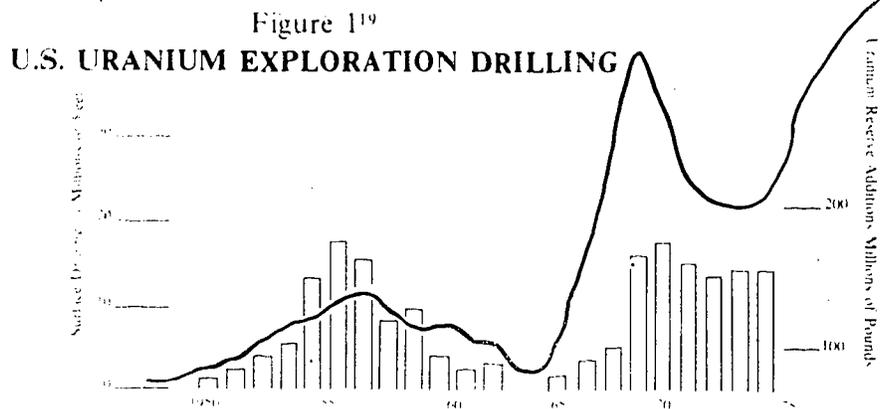


Table 5<sup>20</sup>  
**RATE OF EXPLORATION 1948-1963**

<i>Interval</i>	<i>Drilling year(s)</i>	<i>Cumulation Drilling (10 feet)</i>	<i>Discovery year(s)</i>	<i>Discoveries (10 short tons of U<sub>3</sub>O<sub>8</sub>)</i>	<i>Discovery Rate (lbs) of U<sub>3</sub>O<sub>8</sub> per foot drilled</i>
1	1948-54	11.25	1949-55	79.4	14.1
2	1955-56	23.8	1956-57	117.0	18.6
3	1957	31.2	1958	29.5	18.0
4	1958-61	40.0	1959-62	56.2	12.7
5	1962-67	51.7	1963-68	66.7	11.4
6	1968	68.0	1969	56.0	6.90
7	1969	88.4	1970	55.0	5.37
8	1970	106.4	1971	42.0	2.46
9	1971	117.8	1972	14.0	2.46
10	1972	129.6	1973	14.0	2.37
11	1973	140.5	1974	13.0	2.40

## LAND HELD FOR URANIUM EXPLORATION AND MINING<sup>21</sup>

As of January 1, 1977

### Distribution by State

State	1/1/73	1/1/74	1/1/75	1/1/76	1/1/77
Arizona	486	754	819	942	1,021
California	491	587	619	619	631
Colorado	1,123	1,291	1,592	1,623	1,852
Idaho	34	34	70	81	108
Montana	324	380	438	418	420
Nevada	250	264	312	321	376
New Mexico	3,109	3,158	3,378	3,663	3,885
North Dakota	—	100	100	100	128
Oregon	30	31	31	31	31
South Dakota	224	81	91	87	810
Texas	641	641	627	622	676
Utah	2,602	3,783	3,515	4,185	5,498
Washington	88	72	76	129	401
Wyoming	8,275	5,598	9,608	10,090	11,246
<b>Total</b>	<b>17,677</b>	<b>18,774</b>	<b>21,276</b>	<b>22,911</b>	<b>27,083</b>

Table 7

## LAND HELD FOR URANIUM EXPLORATION AND MINING<sup>22</sup>

(in thousands of acres)

### DISTRIBUTION BY LAND CATEGORY

	1/1/73	1/1/74	1/1/75	1/1/76	1/1/77
State	1,859	1,945	2,968	3,385	4,635
Claim	9,675	10,290	11,634	12,605	15,067
Acquired	206	145	275	277	293
Indian	603	646	635	627	1,215
Fec	5,330	5,748	5,764	6,017	6,273
<b>Total</b>	<b>17,677</b>	<b>18,774</b>	<b>21,276</b>	<b>22,911</b>	<b>27,083</b>

## THE DEMAND FOR URANIUM

### Section 4

The Carter administration's energy policy appears to be to continue the development of nuclear energy with a de-emphasis on the development of the Liquid Metal Fast Breeder Reactor and nuclear fuel reprocessing. Former Energy Administration Chief John O'Leary has stated that "conservation will have the primary emphasis, next will be coal and nuclear will pick up the gap. The gap will be substantial. We are not going to get by with 62 reactors ten years from now." According to the Wall Street Journal, O'Leary foresees about 120 reactors by 1985 and about 500 by the year 2000.<sup>23</sup> The predicted emphasis on nuclear energy by the Carter administration appears to be very similar to Ford's. However, it would appear that the demand for uranium will be greater under Carter's plan than Ford's because:

- a. Carter's de-emphasis on nuclear fuel reprocessing. This could have a profound effect on uranium demand: According to Emmanuel Gordon, of the Atomic Industrial Forum, "Beyond 2000 A.D. if reprocessing is allowed and the nuclear fuel cycle is in equilibrium recycling alone could affect uranium demand by 50%. Through the year 2000 about one-third more uranium will be needed if reprocessing is prohibited."<sup>24</sup>

b. Carter has called for a cutback in the nuclear fast breeder reactor program (rabbit reactor). The purpose of the breeder is to decrease the demand for enriched uranium. The breeder actually produces more fuel than it consumes. Charles Masters, Chief of the U.S. Geological Survey's division of energy has presented evidence demonstrating that with the use of the conventional reactor all of our current reserves could be used up by 1990. With President Carter's decision to abandon the Breeder reactor program, industry will have to find new uranium deposits almost equal to current reserves within 13 years."<sup>25</sup>

The growth of the nuclear industry has been slowed recently by unexpected delays. Decreased electrical demand, public opposition to the use of nuclear energy, construction costs, and siting problems have resulted in the cancellation or deferral of nearly 70% of all planned nuclear reactors.<sup>26</sup> With a stronger better organized national energy policy this trend could change. Confronting such an energy policy is a growing anti-nuclear movement which could lead to continued delays over a long period of time.

The number of installed nuclear reactors is the major determinant of demand for uranium. The Energy Research and Development Administration has developed an estimate of installed nuclear capacity for the years 1980-2000.

Three cases have been projected; a Low case, the pessimistic projection assuming a strong nuclear policy plagued by delays; a Middle case, the most probable; and the High case based on the assumption that a nuclear policy can be pushed without delays.

Table 8

	U.S. Installed Nuclear Capacity <sup>27</sup> <i>Megawatts of Electricity Produced*</i>		
	<i>Low Case</i>	<i>Middle Case</i>	<i>High Case</i>
1980	60,000	67,000	71,000
1985	127,000	145,000	166,000
1990	195,000	250,000	290,000
2000	380,000	510,000	620,000

\*the average power plant will produce 1,000 megawatts of electrical power, thus the number of plants can be seen to be the above numbers divided by 1,000.

The amount of uranium needed to fuel a 1,000 megawatt plant is estimated to be 4,000-6,000 tons of U<sub>3</sub>O<sub>8</sub> for the operation of each plant for 30 years.<sup>28</sup> On that basis, the demand for uranium can be seen to be as little as 1,520,000 tons U<sub>3</sub>O<sub>8</sub> to as much as 3,720,000,000 tons of U<sub>3</sub>O<sub>8</sub> by the year 2000. The immense difference between the two figures demonstrates the uncertainty that the uranium industry will be confronted with over the next 20 years.

Clearly there will be a very tight supply-demand situation no matter which projection is used. This means that the uranium industry will be very actively involved in exploration and development in order to meet the needs of the nuclear industry. Figure 2 summarizes the demand-supply situation by contrasting the three projected numbers of reactors with estimated uranium supplies for the years 1980, 1990, and 2000. Obviously, supply estimates will increase in the future as more exploration findings become known.

The tight demand-supply relationship has prompted the U.S. Government to allow imports of foreign uranium to help meet the demand. The demand for uranium in the rest of the world will be a major factor as to the availability of foreign uranium. Installed nuclear capacity in the world, excluding the United States is expected to grow at a rate of 5100% between 1975 and 1985 and a rate of 1200% between 1975 and 2000. United

States growth is projected at a rate of 512% between 1975 and 1985 and 2500% between 1975 and 2000<sup>29</sup> Demand is much greater outside the United States.

Whether any foreign uranium will be available to import is another question. Demand in other countries is increasing much faster than in the United States. Economically powerful Japan and West Germany, as well as Italy, Great Britain, Sweden, and France will all be competing vigorously for supplies. The French neocolonial and domestic supplies will be controlled by French nuclear interests for domestic use. Australian and Canadian reserves, which are increasingly being set aside for their own domestic use, will also be approached by Japan, who has no coal reserves and whose economy is being damaged by oil prices. Japan sees itself as having to have the supplies and will be willing to pay more; if supply gets that competitive, the consequent rise in prices could make their supplies too costly. U.S. companies are very active in Canada, South Africa, and Australia. They clearly have two advantages in an upcoming world struggle for uranium.

1. U.S. military and economic power.
2. The power and capital of U.S. oil multinationals (backed by U.S. military power), who have established themselves throughout the world in positions of power, with massive amounts of capital. These companies are the prime uranium suppliers.

FIGURE 2<sup>9</sup>  
Lifetime Consumption of Uranium by Reactors  
Contrasted with Uranium Reserve Estimates

		<b>HIGH CASE</b> 620 Reactors 3,720,000 tons
<b>SPECULATIVE RESERVES</b> 3,560,000 tons U <sup>3</sup> O <sup>8</sup>		
<b>POSSIBLE RESERVES</b> 2,970 000 tons U <sup>3</sup> O <sup>8</sup>		<b>MIDDLE CASE</b> 510 reactors 2,555,000 tons
<b>PROBABLE RESERVES</b> 1,700,000 tons U <sup>3</sup> O <sup>8</sup>	<b>HIGH CASE</b> 290 reactors 1,740,000 tons	<b>Low Case</b> 380 reactors 1,520,000
	<b>Middle Case</b> 250 reactors 1,250,000 tons	
<b>KNOWN RESERVES</b> 640,000 tons U <sup>3</sup> O <sup>8</sup>	<b>Low Case</b> 195 reactors 780,000	
	74 reactors 426,000 Tons 1980	
	1990	2000

Figure 2

Major reasons for the large increase outside the U.S. are the inability of other developed countries to muscle in on U.S. oil companies and OPEC controlled oil and lack of other energy substitutes such as coal.

Compared to other mineral commodities, uranium is one of the most critical commodities on earth. In the next 25 years, there is expected to be a 12 to 15 fold increase in the need for uranium as compared to a two to three fold increase for copper, zinc, iron ore, and nickel.<sup>30</sup>

# PROJECTED GROWTH in WORLD DEMAND SELECTED MINERAL COMMODITIES

1975 - 2000

MINERAL DEVELOPMENT SECTOR  
DEPARTMENT OF ENERGY, MINES AND RESOURCES

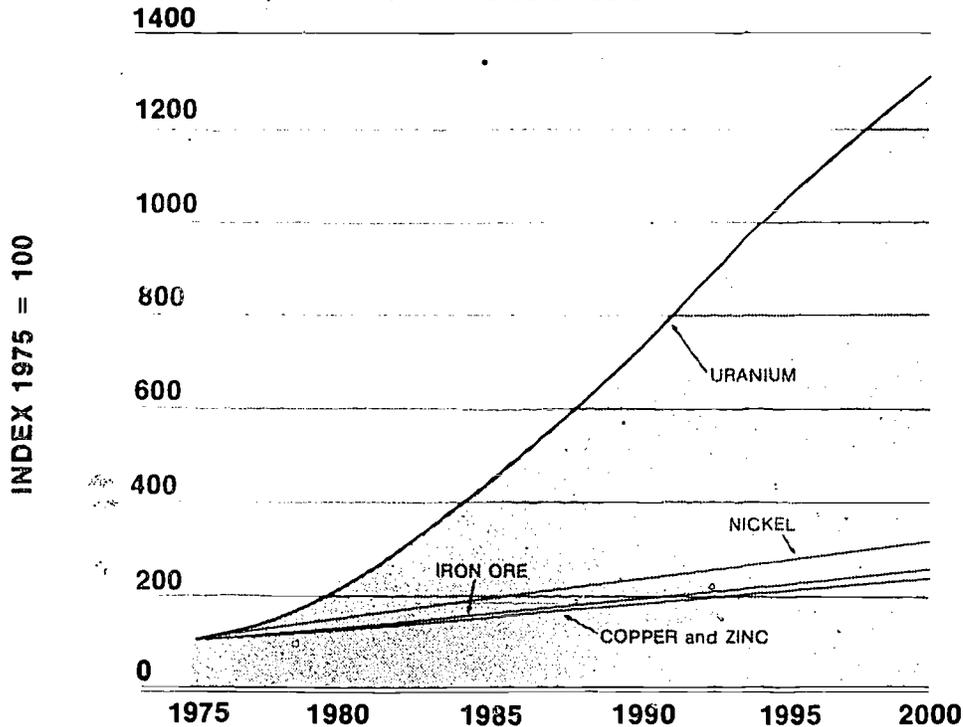


Figure 3

Uranium on Indian lands may then be critically needed for the development of nuclear energy. This infers that the reserves are extremely valuable and that uranium-owning tribes have a powerful stake in the future of nuclear energy.

There are a number of factors which could either decrease or increase the demand:

1. *Changes in electrical consumption* - which will depend largely on measures to increase conservation or the lack of such efforts which will cause consumption increases.
2. *Efforts to promote alternative energy sources* - If efforts to promote solar, wind and other alternative energy sources do not occur, then future energy needs will be dependent upon coal or uranium since oil and gas supplies are becoming increasingly de-emphasized.
3. Consequently, the *relative costs of coal and uranium* will be a prime consideration in which source will be dominant. Three major components determine the cost of producing power at the generating station: Capital costs (construction), fuel costs, and expenditure for operating and equipment maintenance.

At this point, nuclear power plants are clearly more expensive to build than coal-fired generators. Ron Lanar, in the book, *Nuclear Plants: The More They Build, the More You Pay*, compares the costs of coal and nuclear power and finds that construction costs are so immense that they alone make nuclear power much more expensive than coal.<sup>31</sup> Resources for the Future's Richard Gordon, in his book, *U.S. Coal and the Electric Power*

*Industry*, disagrees. His data indicates that the same pressures which are making nuclear power plants more expensive are also having a similar effect on the capital costs of coal-fired plants. He argues that the pressures to impose stringent air pollution regulations on coal use threaten to alter the situation drastically. The extra capital cost on pollution-control equipment may, by themselves, eliminate capital cost differences. (Other costs in coal generation are also rising)<sup>32</sup> Even if capital costs for nuclear power continue to remain higher, the lower cost for fuel may compensate for the difference.

Looking at this in terms of present day comparative costs, "In today's lightwater reactors without plutonium recycle, in which less than 1% of the total heat content is made available, a pound of  $U_3O_8$  produces about the equivalent of eight tons of coal.<sup>33</sup> In terms of cents per BTU\* of heat produced, the cost for uranium is 8c per million BTU's and, for coal, 45-50c per million BTU's. The cost for uranium, including all processing and fabricating costs, would be around 20c per million BTU's.<sup>34</sup>

Operating and maintenance costs are supposedly lower for nuclear energy due to the high cost of environmental controls for coal. Recent pressure from Congress and states may change this situation drastically with the inclusion of numerous safety devices, evacuation precautions, protection from plutonium terrorists and massive publicity to promote the image of safe nuclear power.

ERDA, TVA, and Con-Edison in a number of reports all claim that nuclear power is 10-40% cheaper to produce than power from coal. There are strong arguments to counter this claim. However, a few things are clear.

1. At this point, the cost of uranium fuel is much lower than coal. Fuel costs are a much smaller percentage of the total cost of nuclear energy than coal.
2. Dramatic changes in costs of nuclear power will likely be due to other factors than fuel costs. The price of the energy produced is relatively insensitive to price changes in uranium.
3. Coal is bulkier to ship. Thus shipping costs will be a major factor in areas removed from coal fields, and some areas such as the Northeast will probably tend to have a higher demand for nuclear fuel.

#### **Deterrents to Increased Demand for Uranium Would Be:**

##### **Nuclear Hazards**

Nuclear energy is considered by many to be one of the greatest future dangers facing mankind. According to Sidney Lens in an article entitled, "The Doomsday Machine," nuclear energy:

- a. poses certain dangers to life and health qualitatively different from any humankind has ever known before:
- b. imposes long-term responsibilities, running for thousands of years, which humanity is not equipped to handle:
- c. requires security measures so extensive that any society relying on nuclear energy must ultimately become a police state; and
- d. can become a major threat to world peace if scores of nations that do not yet have access to plutonium gain such access.<sup>35</sup>

There are three main problems which could result in the disasters Lens has cited:

- a. The danger of a reactor accident.
- b. Storage of dangerous nuclear wastes.
- c. The risk of terrorists or others using plutonium waste from reactors to fashion nuclear weapons.

Doctor Daniel F. Ford and Doctor Henry W. Kendall, of the Union of Concerned Scientists describe the possible dangers of a reactor accident in their bulletin, "*Catastrophic Nuclear Accidents*." The large quantity of radioactive material that accumulates in each operating nuclear reactor implies the need for the most stringent care to see that no portion ever escapes. They argue, that the "radioactive accumulation in a large power reactor is equivalent to the fallout from thousands of Hiroshima-sized nuclear weapons" which could be released if the materials were released from the shields. This could happen and has nearly happened on several occasions, the most dramatic being the accident at Three Mile Island. "The uranium fuel in a reactor core is placed inside long, thin zirconium alloy tubes forming the fuel rods. The tens of thousands of fuel rods are mounted inside the reactor pressure vessel, itself installed within another shield. As the fuel is gradually burned, a great deal of radioactivity is created, which generates heat which cannot be turned off. Thus, even if the reactor is shut down so that fissioning ceases, these cooling pipes could rupture, or certain other kinds of malfunction could occur, thus the reactor's normal cooling water could be lost from the hot core. If this water were lost and emergency coolant not supplied promptly and in adequate amounts to the reactor core, then a very rapid heatup would start, which after a period of a few minutes could no longer be controlled. The reactor core would, in these circumstances, melt down and breach all man-made structures, with what appears to be the inevitable release of at least the gaseous components of the fission products. The possibility of an accident was estimated in an AEC document entitled, "The Safety of Nuclear Power Reactors and Related Facilities." It indicated that a pipe rupture might occur as frequently as once in a thousand reaction years of operation. General Electric also has made a similar estimate. According to Kendall and Ford "Accidents are, in our opinion, not highly unlikely at all. In fact, they are unacceptably large. The U.S. now has over 170 reactors operating, under construction or ordered. When these are all operating, we can expect on the basis of AEC's best estimate, to have one pipe rupture every year." They add, "If 20% of a reactor's radioactive material is gaseous in normal circumstances and, if it was released to the environment in one way or another, it could be swept along by winds for many tens of miles to expose people outside the reactor site boundaries to what would be lethal amounts of radioactivity. The lethal distance may approach 100 miles." Injury to health, genetic damage, and increased susceptibility to a variety of diseases can occur at hundreds of miles. A typical urban population density might exceed 8,000 persons per square mile and reactors now are more often getting sited close to major population areas. According to Sidney Lens, "Leo Goodman has accumulated over two decades of documented evidence of 1,500 accidents in the nuclear industry and the AEC, which refused to make public the full record until the last few years, has finally begun to publish a compendium of abnormal incidents, about 850 annually."<sup>37</sup>

The most difficult problem appears to be the storage of nuclear waste. ERDA officials admit that they have no idea of how they are going to solve the problem. According to Thomas C. Hollocher of Brandeis University in his report, "*Storage and Disposal of High Level Wastes*," the times during which radioactive wastes must remain secure from the biosphere have no parallel in human affairs. Eight hundred years is required for fission products alone and millions of years if the fission products continue to be contaminated with transuranic elements at present levels. Fission technology requires that man issue guarantees on events far into the future and it is not clear in most cases how this can be done. Institutional arrangements do not exist and never have existed to guarantee the monitoring of or attendance on storage facilities over a millenium. In a range of that extent, serious geological uncertainties arise and even the survival of man may be doubtful.<sup>38</sup>

Lens argues, "Plutonium alone has a half-life of 24,000 years so that it will remain a problem for man for the history of all civilization. That means that, at a minimum, we require a stable government or international agency that can concentrate on the problem for many thousands of years — a stability no nation - state has even remotely achieved. The AEC and its successor in the research field, ERDA, have been unable to come up with a plan for permanent storage sites and have therefore limited themselves to 'interim' repositories which are described as safe for only 30 to 100 years. The Hanford disposal site in the state of Washington, where  $\frac{3}{4}$  of the nuclear waste from weapons production is stored in 140 huge tanks, each fifty feet high, has had eighteen known leaks, 500,000 gallons of radioactive liquids have been discharged into the earth and nearby rivers. A key AEC consultant told the Los Angeles Times, "We are in a mess right now and what bothers the hell out of me is that

we are only on the edge of the nuclear age. We're sitting on a time bomb." There is more radioactivity in the Hanford storage site," reports correspondent Lee Dye, "than would be released during an entire nuclear war."<sup>39</sup>

Another problem that must be faced is the danger that the wastes from nuclear power plants, which ERDA is planning to reprocess in order to separate plutonium for use as nuclear fuel, can be used to make atomic bombs. Doctor Lawrence Scheinman of Cornell University, in *The Nuclear Safeguards Problem*, points out that "the chief obstacle a group faces in making a nuclear weapon is obtaining the material. Uranium 235 can be separated to the required concentration from naturally occurring uranium only with the greatest difficulty. In obtaining weapons material, the diversion of someone else's supply can be a very attractive, inexpensive means."<sup>40</sup> Thus storage of nuclear processed wastes presents a security problem. Transportation of the waste also creates a problem. According to Lens, "The AEC itself in the Rosenbaum Report of 1974, hinted that nothing less than a police state will suffice." Scheinman claims that the safety precautions are currently minimal.<sup>41</sup>

All of these problems associated with the safety of nuclear energy have led to massive resistance movements to nuclear energy throughout the world. The results of this resistance could be the collapse of the entire nuclear industry. Tribes who are or may become dependent upon uranium for tribal income should be concerned with the dangers of nuclear power. Public knowledge of the possible disasters which the nuclear industry could thrust upon society could result in the end of all uranium mining and development efforts forever.

There is some doubt as to whether adequate uranium reserves can be found and developed quickly enough to supply the rapidly growing nuclear industry. Nuclear opponents and many journalists have been reporting that reserves are inadequate and that efforts to develop nuclear power are faced with an ultimate end due to lack of fuel. Much of the basis of these claims appears to be supported by lack of understanding of what reserves are.

Reserves do not indicate how much uranium exists, but rather how much is known to exist at a particular time. Little is known about the geology and geography of uranium since exploration and research has been going on only for a short period of time. As with all minerals, it can be expected that as more knowledge is accumulated on uranium geology, and as exploration efforts become more advanced, that more uranium will be found.

However, uncertainties over supply have prompted many utilities to become involved in the exploration and development of uranium to assure that they will have supplies. Consolidated Edison, a Chicago utility and the Tennessee Valley Authority, the largest purchaser of uranium, are both involved directly in mining and exploration. Other utilities have become major sources of capital to mining firms.

The critical demand for uranium coupled with the tight supply of uranium indicates that uranium on Indian lands may be necessary if the nation's energy goals are going to be met. Current production and known reserves on Indian lands are already included in the Federal Government's definition of uranium supply. This situation potentially places tribes in a powerful role as to the future of nuclear energy. On the other hand it could place tribes who oppose development or who demand fair value for their uranium, in a dangerous situation, with the threat of possible expropriation of their lands.

## THE URANIUM INDUSTRY

### Section 5

If a tribe decides to develop its uranium reserves, tribal decision-makers should have a good understanding of the companies they would have to deal with.

Uranium mining, as most mining industries are, is an extremely technological, complex and capital intensive industry making it difficult for a tribal government to undertake mining independently. It appears that it would be necessary for a government to enter into an agreement with a company who has adequate technology, managerial competence, and access to capital, if it wishes to develop its uranium reserves. The benefits the tribe would receive and the amount of control they would have over the development is dependent upon the balance of bargaining power between the tribe and the company. The balance begins with the fact that the tribe owns the uranium and the company controls the technology needed to extract it.

### OWNERSHIP AND CONTROL OVER U.S. URANIUM AND PRODUCTION

All uranium reserves in the United States are owned or leased by a few multinational corporations. In 1970, seven firms controlled 70% of all uranium reserves while ten others controlled 20%.

Table 9  
**THE URANIUM INDUSTRY<sup>42</sup>**  
 Control of Uranium Reserves, 1971

Companies Listed in Alphabetical Order	% of Low-Cost Uranium Reserves
Anaconda Company (Atlantic Richfield Oil Subsidiary)	
Getty Oil Company	
Gulf Oil Company	
Exxon Corporation	
Kerr-McGee Corporation	
United Nuclear Company	
Utah International, Inc. (General Electric Subsidiary)	
Subtotal for Seven Companies .....	70.0
Atlas Corporation	
Continental Oil Corporation	
Cotter Corporation (Consolidated Edison Subsidiary)	
Dawn Mining Company (Newmont mining Subsidiary)	
Federal-American Partners	
(A joint venture of Federal Reserves & American Nuclear)	
Homestake Mining Company	
Rio Algom Corporation (Rio Tinto Zinc Subsidiary)	
Susquehanna-Western, Incorporated (Phelps Dodge Subsidiary)	
Subtotal for 10 companies .....	20.0
Total for 17 companies .....	90.0

Although there is no public information on the quantity of uranium owned by each firm, an investment company has released the following estimate of reserve ownership.

Table 10  
**ESTIMATED DOMESTIC URANIUM ORE RESERVES<sup>43</sup>**

	At \$15/lb. Selling Price	at \$40/lb. Selling Price	Uncommitted \$40/lb. Price	Uncommitted Lbs. Per Share
..... Millions of Pounds .....				
1. Kerr-McGee	114.8	170	118	4.6
2. Gulf Oil	100	110	110	0.6

3. United Nuclear	80	90	52	8.8
4. Utah International (General Electric)	40	55	30	1.0
5. Anaconda (Atlantic Richfield)	40	50	30	1.4
6. Exxon	40	45	?	?
7. Western Nuclear (Phelps Dodge)	17.3	25	18	0.9
8. Reserve Oil and Mining	11	15	12	9.0
9. Ranchers Exploration	10	12	7	4.9

These reserve estimates include uranium on Indian lands. 1. Kerr-McGee, Navajo 2. Gulf Oil, Navajo 3. United Nuclear, Navajo 5. Anaconda Laguna Pueblo (all Anaconda reserves are within the Pueblo) 6. Exxon, Navajo 7. Western Nuclear, Spokane (almost all of their reserves are within the Spokane Reservation.)

### URANIUM PRODUCTION

In terms of production, for leading producers, Kerr-McGee, Anaconda (solely from Laguna Pueblo), Utah International, and Exxon produced 56% of total mine production in 1974. Eight other companies produced 40%<sup>44</sup>.

Table 11 indicates who the major uranium producing companies are by examining the amount of uranium milled by each company. It must be remembered that these figures are milling capacity figures rather than mine production. However, since milling firms mined on the average of 85.5% of their own ore, these figures are a fair indication of mine production.

Table 11<sup>45</sup>  
U<sub>3</sub>O<sub>8</sub> Milling Capacity 1976

Rank	Company	Production Tons U <sub>3</sub> O <sub>8</sub>	% of Total
1.	Kerr McGee	7,000	22%
2.	Utah International (General Electric)	3,600	12%
3.	United Nuclear - Homestake Mining	3,500	11%
4.	Anaconda (Atlantic Richfield)	3,000	10%
5.	Exxon	3,000	10%
6.	Union Carbide	2,500	8%
7.	Western Nuclear (Phelps Dodge)	1,700	5%
8.	Sohio-Reserve (Standard Oil of Ohio)	1,660	5%
9.	Atlas Corporation	1,000	3%
10.	Federal American	950	3%
11.	Rio Algom (Rio Tinto Zinc)	700	2%
12.	Cotter Corporation (Consolidated)	450	1%
13.	Dawn Mining (Newmont Mining)	400	1%
	Total	31,200	100%

Examining the firms within the uranium industry one can see several major characteristics of the industry.

1. *Oil Industry Domination:* Three of the four largest producers (Kerr-McGee, Atlantic Richfield, Exxon) and five of the seven largest reserve owners (Getty Oil, Atlantic Richfield, Gulf Oil, Exxon, Kerr-McGee) are oil firms. In 1971, the last year the federal government obtained reports from the highly secretive uranium industry,

50% of all reported reserves and 61.6% of current production was known to be directly controlled by oil firms.<sup>47</sup> It also appears that the great majority of all current exploration efforts are by oil firms (over 60% of current exploration efforts in New Mexico is by oil firms,<sup>47</sup> in 1970, over 56% of all exploration activity was by oil firms).<sup>48</sup>

Accompanying the takeover of the uranium industry by oil firms has been their entrance into control of reserves of coal, oil shale, and geothermal energy. In 1970, 33% of all coal production was directly controlled by oil firms; today, it is estimated that they control a majority of the nation's coal reserves and are actively engaged in exploration and leasing.

The apparent strategy of the oil companies has been to integrate their operations horizontally; that is to gain control over all energy sources which could potentially be substituted for their oil. As a result, we now have an energy industry rather than separate uranium, oil, and coal industries. The move toward horizontal integration by the multinational energy companies has been prompted by several factors.

1. The move by third world oil producing countries to gain control over their own oil reserves has limited the control over and access to these reserves that the companies formerly had. In many cases oil fields formerly controlled by multinational oil firms have been completely nationalized. In other cases the possibility of continued control and access is becoming increasingly uncertain. In the past, the great majority of profits made by these companies were from overseas oil fields in third world countries.
2. Environmental, economic and political events have made it somewhat uncertain as to what energy source (coal, nuclear, oil, natural gas) will become dominant in the future. As most of the world's energy needs were formerly met by the oil and gas supplied by a few major multinational oil firms, it is in the best interests of these firms to retain their dominant position in the energy market by controlling any substitutes to oil and gas.

Oil companies seeking to invest their revenues in the most profitable and least risky areas have determined that they must invest in safe areas in the world and that they must invest in energy sources for which there will be a market. Quite logically, they don't want to end up totally dependent on an energy source which isn't going to be used. According to oil economist, Michael Tanzer, formerly of Exxon:

"Gaining such control could provide the oil companies with several benefits. First, they could make monopolistic profits by driving up prices. Moreover, since there is substantial competition among different energy sources, they are thus allowed to maximize the monopolistic profits from their oil. It would tend to speed up the growth and guarantee the stability of companies insofar as coal and uranium would be used relatively more than oil, in the fast growing yet stable market, the electrical utilities."<sup>49</sup>

In gaining control over competing energy sources, companies can develop the strategy of holding reserves from development, thus preventing potential competitors from developing them, effectively insulating energy sources that they are already producing from competition. In addition, controlling a large number of potentially competitive energy reserves gives the company the opportunity to regulate prices by creating artificial scarcity. Thus a particular coal, uranium, oil shale or geothermal reserve may be leased by a particular company not for the purpose of development in the near future, but rather to prevent someone else from developing it and possibly interfering in their control over an existing energy source. Indications are that coal reserves are being held from development. In 1975, the General Accounting Office released a study indicating that federal land administrators were allowing leasees of federal lands to hold land from development even though their own regulations gave them the opportunity to prevent it.<sup>50</sup> A study by the Council on Economic Priorities on federal

coal leasing entitled *Leased and Lost* concluded that, "Holding speculative leases has characterized the Western Coal movement."<sup>51</sup>

Congressman Morris Udall has argued that because of their control over alternative energy sources, "oil companies are increasingly able to make fundamental decisions about prices and production levels of the energy resources which are the primary competitors with oil. If oil companies gain further control over the coal industry, they might well conclude that their overall profits would be maximized by keeping oil prices high and restricting the production of coal"<sup>52</sup>

Such restriction of uranium production from uranium leases does not appear to be occurring, however, this possibility cannot be ruled out in the future as changes occur in energy policy and markets.

Legislation has been introduced in Congress to ban oil company ownership and development of energy sources other than petroleum. Such legislation has the support of Democrats in Congress and several key members of the Carter administration. The effect of this kind of legislation is known as *horizontal divestiture*. Companies would be required to divest themselves of all competing energy production and reserves which they own.

2. *Other major owners of uranium operations and reserves are multi-national mining companies and conglomerates:* Phelps Dodge, (owner of Western Nuclear), Newmont Mines (owner of Dawn Mining), and Rio Tinto Zinc (owner of Rio Algom) are all major world metals mining firms. Conglomerate Union Carbide is the largest petrochemical producer and a major metals producer and conglomerate General Electric (owner of Utah International) is a major appliance, electric power generation, aerospace, and components manufacturer. These five firms control about one-fourth of uranium reserves and production. They have entered the uranium industry for the purpose of *diversification*. Having earned tremendous revenues from other industries they have chosen to invest those funds into uranium because they feel that the industry can earn them high profits on their investment — higher profits than they could earn if they invested their funds elsewhere. Diversification is also undertaken to insure them that they are not dependent on revenues from market conditions of a single industry. By spreading investments over a large number of unrelated operations they can be assured that if the market goes bad in one operation, they can make up for it elsewhere. It is good for their stockholders.

In the case of the multinational mining firms, the fact that they already have considerable mining technology and expertise which can be easily transferred to the exploration for and production of uranium, their movement into that industry appears quite logical since it appears uranium will be a very profitable mineral.

3. *There are very few firms involved in the uranium industry whose primary product is uranium.* Looking at the industry historically one will find that there are becoming fewer and fewer firms in the industry which are primarily uranium producers. This is generally true in most industries. In the beginning stages there are a large number of entrepreneurs and small firms hoping that they can succeed in establishing themselves. As the industry advances, generally, the smaller firms either find themselves unable to compete and go bankrupt or they are swallowed up by larger firms. Because uranium mining and processing is capital intensive and technologically complex, firms who already have established expertise and have access to large amounts of capital will ultimately become dominant. In many cases the larger firms wait until they are sure the industry will be profitable and then buy their way in. One can expect the trend to continue as major oil and mining companies become interested in the high profits uranium can bring.

4. *Vertical Integration:* Most of the companies within the industry have undertaken the strategy of controlling all phases of uranium production from exploration to mining, milling, conversion, fabrication, generator construction, and possibly enrichment. Recent moves towards vertical integration have been made by General Electric in its purchase of Utah International, and Atlantic-Richfield in its purchase of Anaconda Copper. General Electric formerly operating only in the areas of conversion, fabrication, and generator

manufacturing has become fully vertically integrated through Utah International's ownership of exploration, mining and milling operations. Atlantic-Richfield, formerly operating in areas of fuel fabrication has become nearly vertically integrated through Anaconda's exploration, mining and milling operations. Getty Oil, Kerr-McGee, Exxon, and United Nuclear are all fully or nearly vertically integrated.

Vertical integration provides companies with a number of advantages. Each stage of processing adds more and more value to the uranium as it becomes a usable product. Controlling each stage of processing gives the company the opportunity to profit from additional value they add at each stage. It also gives them the opportunity to distribute profits and costs in stages of production where it will have the most favorable effect on their overall balance sheet. Thus, if there are considerable profit taxes in the mining stage, they can have the opportunity of reducing profits at that stage by charging more for the inputs they provide and increasing the milling costs and then make their profits at stages which are not taxed. In addition, vertical integration can have the effect of insulating the company from a fall in the price of uranium. If the price decreases, the loss can be made up by increasing their profits at another stage of production.

This should prompt a uranium reserve owning tribe to audit transportation and milling costs listed by companies to insure that they are real costs, not inflated costs, posted to limit the tribes royalty take. In addition, a tribe should be concerned with who the uranium is being sold to. If they are selling it to themselves, or a subsidiary they may be selling at abnormally low prices.

5. *Almost all the companies operating in the uranium industry have a host of different operations spanning the entire world. They are multinational, multi-state companies.* The international interests and relationships of the company are diverse and extremely complex. Exxon, for example, operates 275 subsidiaries in 50 countries.

The advantage of operating multinationally is that it allows companies to have monopolistic control over foreign sources of energy resources which could potentially be competitive with their domestic resources (or vice-versa). Companies can buy and sell on privileged terms and shift operations from one country to another depending on which has the most advantageous tax laws, royalty rates, labor policies, and government monitoring capabilities. This gives the company the advantage of being able to play one country, tribe or state against another. If a tribe or country demands a higher percentage of the profits from a particular operation, the company can threaten to move out to a different area where the mineral owners demand a smaller share of the profits. As was pointed out in Section 2 of this chapter, mining and oil companies have responded to the demand for a greater share of the profits and control over development by developing countries by shifting their development to areas in which they could insure greater control and consistently higher profits. As a result they are now exploring on Indian and public lands in the United States and safe areas such as Brazil, Canada, and countries, who often lacking the capital and technology to explore themselves, have been forced to offer the companies more for their resources and leave less for themselves.

6. Companies involved in uranium development have *tremendous assets and are among the largest economic units in the world.* Exxon, the largest corporation in the world, had revenues in 1976 alone of fifty billion dollars, more than the total income of any single Organization of Petroleum Exporting Country (almost as much as all of the OPEC countries put together), and 2,000 times the income of the largest Indian tribe, the Navajo Nation.

Table 12

1976 Revenues of Major Uranium Producing Companies<sup>53</sup>

<i>Companies</i>	<i>Revenues in Billions</i>
<i>Exxon</i>	50.
<i>Gulf Oil</i>	16.
<i>General Electric</i>	14.
<i>Atlantic Richfield</i>	8.

<i>Union Carbide</i>	6.
<i>Getty Oil</i>	3.
<i>Kerr-McGee</i>	2.
<i>Phelps Dodge</i>	1.
<i>United Nuclear</i>	.1 (\$100,000,000)

The kind of political and economic strength which such assets give a company is reflected in their ability to develop and buy unlimited technology, their unrivaled body of expertise, their access to information and the availability of large amounts of capital with which to expand and grow. Control over that much capital gives companies the ability to undertake lobbying efforts and last through years of litigation.

7. *Oligopoly*: As we have seen the uranium industry is one in which a few firms control the majority of production. The energy industry, as is true in the case of all mineral extraction industries, is not very competitive. The degree of competition is a major determinant of price. Without competition firms can safely raise their prices to levels where they can receive higher profits without facing competition through price-cutting by competitors. (The degree to which this can be done is dependent upon supply and demand.) The degree of competitiveness is measured by:

- a. The concentration ratio of firms in the industry. This is generally determined by measuring the percentage of production controlled by the four largest firms, the eight largest firms and the twenty largest firms.

The concentration ratio of the uranium industry appear as follows:<sup>54</sup>

4 firms	55%
8 firms	80%
20 firms	100%

It is often argued that the uranium industry is not an oligopolistic industry because there are other industries which are more concentrated. This is usually demonstrated by comparing the uranium industry to other oligopolistic industries such as copper, automobiles, or gold.

- b. Relation of cost to price profitability. According to a study done by the Federal Trade Commission on the energy industry, "The oil companies demonstrate a clear preference for avoiding competition through mutual cooperation and the use of exclusionary practices . . . profit rates for the eight largest companies are usually 10-20% greater than average American firms . . . with regard to uranium mining and milling the concentration is even higher."<sup>55</sup>

- c. The effect of changes in demand on price. In a monopolistic industry you generally find that prices will not change rapidly in response to changes in demand. This effect is only seen when there is a downward trend in demand. In a non-competitive industry, if demand falls then price doesn't react. This effect is impossible to measure in the uranium industry because price has constantly escalated since the market opened.

One can safely assume that there is a low degree of competition in the uranium industry. This is true because large scale operations are the most efficient and in most cases smaller scale operations are impossible. Therefore, only those firms which can raise the necessary capital are able to enter mining. In addition, the technology used in extraction and processing is expensive and complex, again limiting access to large firms. Larger firms also have more funds available for use in research and development of cost reducing technology.

The riskiness of exploration necessitates that a firm be able to operate a large number of exploration units at one time. Since exploration generally has a success rate of one into twenty-five, a company needs to be able to operate a number of units with insurance that if only one proves to be successful, it will more than compensate for funds lost by other units which failed. As pointed out earlier, the strong positions of horizontal, vertical, and multinational integration give these firms clear advantages over smaller firms.

The greatest effect of oligopoly is increased profits. Although there is some argument as to whether increased size of firms and decreased competitiveness leads to lower costs, clearly both lead to higher prices and consequently greater profits or surpluses.

In an article in *Forbes*, the editors representing a widely held opinion in the business community commented on the profitability of the uranium industry. "The argument generally runs that the uranium business is a risky and expensive business, and unless the customer does his share, it's not worth it for the producer to find the stuff and take it out of the ground. That attitude made sense in the 1960's when uranium was selling at \$5 a pound, often below the cost of mining it. But, does it make sense at today's spot prices of \$40 and up? says Ron Conley, Chief of Commodities Analysis, for the British Mining Combine Consolidated Gold Fields. At these prices you and I could go out and find uranium. Another London Mining Analyst, Chris Beck of Stockbrokers W.I. Carr and Company, has worked out estimates showing pretax margins in the new Australia mines to be as much as 60% of the sales in 1980. Homestake Mining will probably make over cost profits of 44% on uranium this year; United Nuclear 30%. Such returns may become the rule as old contracts, signed when uranium was cheap, are replaced by new ones at four times that price."<sup>56</sup> Detailed information on costs and profits from uranium operations is impossible to obtain since companies are holding it confidential. In any case, clearly, competition is minimal and profits are tending to get higher and higher.

There is nothing inherently wrong with the fact that huge profits are being generated. The real issue is how the profits are distributed. Very clearly, tribes who are uranium, coal or oil and gas producers have not shared fairly in the profits generated by their own resources. However, as tribes begin to exert the economic power that their bargaining position reflects, the high prices and profits earned could be to their advantage. The high surpluses from uranium sales result in an increased opportunity for tribes to bargain for a greater share of those surpluses. Even on a percentage royalty basis, the higher the price, the greater the take for the tribe. However, someone must pay for the increased prices and ultimately it will be the consumer. In a situation where tribes are demanding a fair share of the profits from their uranium it could be contrived that Indian tribes (in a portrayal similar to the racist stereotype of Arabs) are the cause of high energy prices, effectively portraying the situation as tribes and companies pitted against the interest of energy consumers. Although caution should be exerted to avoid such a situation it should be realized that tribes desiring revenues to improve their economic situation have no choice, in the immediate future, but to deal with the oligopolistic energy industry if they wish to develop their energy resources. Although there may be options in the future such as dealing with national or state owned companies or possibly wholly owned tribal ventures, at the present the only parties with the capital, technology and expertise are the energy companies. Ultimately, all aspects of pricing rest in the hands of the companies. The tribe has no control over pricing. Thus to expect tribes, the poorest group within the country, to take less than the real value of their last remaining resources is absurd. The responsibility of tribal decision-makers is to insure that they receive fair value for their uranium. The responsibility of American consumers is to demand a just price for their energy.

A negative result of the lack of competition within the uranium industry is the refusal of companies to compete on bids for development or exploration of Indian lands. According to a Federal Trade Commission Bureau of Competition study on mineral leasing on Indian lands, "Uranium sales (on Indian lands) have not been very competitive: only 35.6% of the tracts offered for bid were bid on at all, and only 6.2% of tracts bid on received four or more bids. The average number of bids has been only 1.7 per tract." The report concludes, "The high concentration on bidding on Indian uranium could therefore mean that in the long run the Indian sellers do not receive the maximum value of their resources which could be received if the level of concentration were lower."<sup>57</sup>

## The Uranium Cartel Controversy

In August of 1976, the International Friends of the Earth, an environmentalist group, gained possession of files which clearly demonstrated that representatives of uranium companies and governments of Australia, Canada, France, and South Africa had arranged to fix the price of uranium.<sup>58</sup> The United States Justice Department is now investigating the possibility that U.S. companies were involved. It appears that Gulf Oil had directed its Canadian subsidiary to join with uranium companies overseas in fixing higher prices for uranium.<sup>59</sup>

Westinghouse Corporation, formerly the largest purchaser of uranium, has brought suit against virtually every uranium company in the world charging them with illegally raising and fixing prices since 1972, and refusing to sell uranium to Westinghouse. They have charged that U.S. companies had met in 1972 and 1973, and as a group conspired to raise prices from a level of \$6-\$6.50, to a level of \$10.40-\$11.60 per pound, that they allocated markets between members and they acted to eliminate competition from intermediaries in the uranium market, such as Westinghouse.<sup>60</sup>

The basis of the current interest in the uranium cartel is the fact that prices have risen from \$6 a pound in 1972 to \$41 per pound in 1977. The reaction to such a phenomenal price increase is that there must be some sort of conspiracy. Ignored is the fact that the cartel appears to have increased prices at a rate of 75% while prices have actually risen 700%. Apparently the cartel's marketing arrangements have been overswept by market conditions making the price-fixing directive of the cartel unnecessary. Probably the most plausible explanation for the price increase is that the increase in oil prices between 1972 and 1974 made it much safer to increase prices for oil substitutes. Producers seeking to maximize profits, have taken advantage of the high demand, the high price of substitutes and the lack of competition within the industry to raise prices to maximum levels without fear of decreases in demand or retaliation from other energy producers.

Although the alleged 'price-fixing' conspiracy is probably irrelevant, what should be examined is the possibility that companies have attempted to avoid competition by dividing reserves among themselves and allocating to each company a certain percentage of the sales market. Former Chief Economist of the United States Senate Committee on Anti-trust, the late John Blair, had accumulated evidence that energy companies had been dividing up prices and squashing potential competitors.<sup>61</sup>

### Government Subsidization of the Uranium Industry

The Nuclear industry has, as a whole, received massive support and assistance from the federal government. Uranium exploration and mining companies have received assistance in exploration from the Energy Research and Development's National Uranium Resource Evaluation at a cost to taxpayers of 27 million dollars in 1976 alone.<sup>62</sup> In total, 85% of the total capital invested in the entire nuclear industry, more than 8 billion dollars, has come from the federal government. In addition nuclear corporations have guaranteed free liability insurance, support for research and development, low-cost fuel enrichment, price guarantees and other direct subsidies.<sup>63</sup>

Government involvement stems from the fact that the nuclear program is an outgrowth of the military nuclear weapons program. Initial attempts for the peaceful use of nuclear power were made by the federal government within the weapons program. As research made headway, various aspects of the nuclear fuel cycle were turned over to private companies. The trend was to pass on to private corporations as much of the nuclear power program as they would accept, leaving the aspects of the program which were unprofitable in the hands of the Federal government. Federal involvement is also based on the dangerous nature of nuclear substances and the need for some kinds of control over their use.

Until 1970, the federal government was the only purchaser of uranium. The Atomic Energy Commission had determined the price of uranium, and the quantity produced. Prices were established on the basis of the costs of mining plus a reasonable rate of return to the company. The companies were then assured a riskless market and a definite profit. While a uranium market has now developed and prices have begun to rise to a point where

the industry has become extremely profitable, government subsidization and support has continued. The costs of uranium exploration and development continue to be socialized while the profits have become monopolized.

### **The Balance of Bargaining Power Between Tribes and Companies**

The primary goal of the uranium firms is *Profit Maximization*. Quite clearly and necessarily the goal of any corporation is to maximize profits. All other goals are established with that goal in mind.

The modern energy firm is in a very good position to do that. They have the best expertise, control over information and a powerful network of subsidiaries and operations. Within the corporate structure the goal of a particular mine or operation is to improve the profit position of the entire corporate economy. This dictates that they will seek to keep all costs in a particular operation to a minimum. It does not necessarily mean that they will try to maximize profits (or more correctly, the appearance of profits) from a particular mining operation. In the interest of minimizing royalties or taxes, they may post operating costs at inflated rates and depreciate equipment at much higher than actual rates. This gives the appearance of little or no profits for that particular operation, but allows them to pick up their profits elsewhere.

To aid the corporation in its goal of profit maximization of its entire corporate economy a company also has as a goal control over all decision-making with regard to a single operation. They want to make the basic decisions regarding management, marketing, and financing so that they can insure that the operation will fit into their multinational, vertically, and horizontally integrated corporation economy. Often this can mean that the growth and profitability of a particular mine will be subordinated to their overall planning.

The decision-making of the company thus is made according to the goal of profit maximization of their entire economy rather than according to the needs of the local economy where one of their many operations may exist.

The goal of the tribal government is to maximize economic benefits from a particular mine in order to meet the needs of the tribe's economy. At the same time they wish to minimize environmental, social and cultural costs to the community that may result from mining operations. A tribe will also have the goal of control over operations so that the decision-making and planning can be made on the basis of the tribe's needs and goals.

Both parties will not be able to achieve all of their goals, and to a certain extent the interests of each party is in conflict with the other. The distribution of costs and benefits between the company and the tribe is a function of the amount of bargaining power each has. In the past companies have had all of the bargaining power giving them the power to dictate all of the terms, distributing the costs and benefits to their favor. This now appears to be changing.

The bargaining power of a tribe is dependent upon a number of factors including:

1. *Information:*

- a. on the value of the uranium which they own. (quantity, grade, depth)
- b. on the costs of mining similar deposits
- c. on the world and U.S. market for uranium
- d. the agreements made between other mineral owners and companies strategies
- e. the strategies and infrastructure of the mining company

At this point one of the biggest barriers faced by the tribes is lack of information in all of the above areas. Tribes are left in the position of selling a product without knowing its value. As pointed out earlier, companies have all of the information. They have excellent data (but not specific) on uranium reserves on Indian lands through their complex aerial and satellite photography and knowledge of area geology. Having mined deposits

all over the world they know what it costs, having come to agreement with dozens of private owners, states, and countries they know what they can get. The lack of democracy within the corporate structure and the presence of fair and democratic processes within the tribe allows the company to see the tribes' strategies without revealing their own.

2. *Expertise:* In order to properly utilize information and to bargain from a position of knowledge and experience, a tribe must develop on its own or have access to expertise. Lack of capital and lack of expertise in mining has left tribes without this expertise. Companies have all the expertise.

3. *Market Conditions:* The demand for uranium in relation to the available supply will determine the importance of the deposit to users and along with the degree of competitiveness in the industry will determine the price at which the uranium will be sold. As we have seen in sections 3 and 4 of this report, the demand for uranium is intense and there is some question as to whether supply is adequate to meet current demand. This leaves the tribes in a powerful bargaining position. The current high prices provide companies with a lot of incentive to reach an agreement with a tribe.

4. *The share of the market which the reserves owned by tribes represent.* Tribes own at least 13% of the current known reserves. Long-term estimates of U.S. uranium reserves indicate that tribes may own up to 45% of U.S. uranium supplies. Since uranium is so much in demand, any reserve of significant size may make up an adequate share of the market to command strong bargaining power. If several tribes owning uranium deposits cooperate in information sharing each tribe's bargaining power will be increased.

5. *Government Policy* will affect the balance of information and expertise and have a profound effect on market conditions.

- a. government emphasis on nuclear power and energy source will determine the demand for uranium. Policy as to the development of the fast breeder reactor and fuel reprocessing will be major factors determining how much uranium will be needed.
- b. government fulfillment of its trust responsibility to Indian tribes will be a major factor as to whether tribes will have the funds to hire expertise and the networks to obtain information. The extent to which the Federal government assists tribes in taking inventory of energy resources will be a major factor as to whether tribes will have information on what they own.
- c. federal recognition of the sovereign and property rights of Indian tribes will be essential if tribes are to bargain to achieve their own goals rather than national goals. The fact that President Carter has stated that the energy crisis is "the moral equivalent of war" indicates that energy policy will be a very high priority backed by all the strength of the U.S. government. There then becomes a question as to whether tribes will be able to develop their resources as they see fit or whether they will be developed according to some other goals.
- d. leasing regulations on federal lands will to some degree determine the competitiveness of Indian lands with federal land.
- e. federal regulations will determine to some degree minimum environmental and safety standards.

6. *The Extent to which State Governments can tax Indian Uranium.* Such state interference in Indian

sovereignty could result in a subordination of the tribes' goals to those of the state. The revenues that the state would drain from the operation would leave less for the tribe to bargain for; if state taxation levels are high enough there may be very little left for the tribe.

7. *Internal Political Problems:* The degree to which the tribe is organized and operating efficiently will partially determine the overall bargaining power of the tribe. One should strive for:

- a. clearly identified goal toward development.
- b. an adequate degree of tribal unity in achieving those goals.

If goals are not established and proven to be acceptable, political divisiveness can be exploited by the companies or other outside parties. As seen by the actions of energy companies they are quite prepared to exploit or create division to meet their own goals. The actions of Gulf Oil and others in influencing government officials throughout the world in order to earn political favors is a clear example. Gulf admitted to diverting more than ten million dollars to an illegal fund to be used exclusively for influencing foreign government figures so that the policy of these governments would be established according to Gulf's needs rather than the people's. The real amount of cash involved is unknown.

It has also been proven that both Exxon and Mobil Oil had set up huge funds entirely for the purpose of financing political candidates and parties in Italy, who promised to work for the oil companies interests.

Exxon is estimated to have spent \$60 million for that purpose and Mobil at least \$2 million. The political parties who received these funds became dependent on them for a substantial part of their income and were not likely to become centers of agitation against the oil companies.<sup>64</sup> The behavior of Shell Oil on the Crow reservation is an example of a more subtle kind of bribery. Shell attempted to coerce tribal members into approving a miserable coal lease by offering the tribe a sum of money that would be distributed in a per-capita payment of \$250 per person if they voted to approve the lease before the Crow fair, the central event of the Crow people. Shell was in fact taking advantage of the short term cash needs of the Crow people hoping they would obscure their understanding of what their coal was actually worth. However, the offer was rejected. Shell then made an offer of what would amount to \$1,000 per capita. That also failed. They upped their offer to \$1,500. The value of the coal is estimated at 30 billion dollars (at today's prices).

The more knowledge the outsider has on the internal working of the tribe, the more leverage points it will have to create dissent. The more organized, informed, and unified the tribe is, the more difficult it will be to create internal problems.

At this point it appears that tribes have a relatively poor bargaining position. In contrast to the companies they will be dealing with, they have very limited access to information and expertise.

Efforts are being made by tribes to change the balance of bargaining power in a number of areas. Tribes are individually and inter-tribally developing research bodies to accumulate the information needed to make informed decisions. (The Northern Cheyenne Research Project, Crow Coal Authority, Council of Energy Resource Tribes, and the Native American Natural Resource Federation). Such organizations can potentially become information pools where information can be accumulated, summarized, and made comprehensible so that decision-makers and all tribal members can make informed decisions. The kinds of advantages which inter-tribal information pools could provide could be:

- a. cost reduction; the expenditures needed to operate such a pool by a single tribe may be too great.
- b. monitoring market conditions; current supply, demand, prices, and other trends can be monitored regularly and trends predicted for the future.

- c. monitoring corporations; maintain files listing projects carried out by companies throughout the world, along with descriptions of projects they operate. Lists of corporate subsidiaries and activities can give a decision-maker an idea of who they are dealing with and how a proposed venture might fit into the overall plans of a particular corporation.
- d. sharing agreements and experience in dealing with companies with all other tribes. Files of agreements can be maintained so that decision-makers can have an informed idea of the options available to them.
- e. sharing agreements and experience with representatives of other countries and U.S. communities. This will broaden the range of options which can be viewed. It will also enable tribal decision-makers to learn from the experiences of others who have already gone through the process.
- f. analyzing data and collecting information on environmental, social, cultural, and political impacts of development. Also the pool could consolidate information gathered from water and air pollution monitoring.
- g. develop models for tribal environmental codes, mining codes, and tribe company agreements which can be used by all. Copies of various codes could be maintained and reproduced.
- h. monitor federal and state legislation and regulations affecting energy development and programs which could be utilized.

The information pool could also purchase equipment such as computers which could be used to analyze mining projects without relying as much on company data.

Tribes are also increasingly laying aside funds for the training and hiring of expertise. Several tribes have utilized negotiators who have had considerable experience in negotiating progressive agreements in developing foreign countries. Pressure on federal administrators has resulted in better access to expertise within the Bureau of Mines and the United States Geological Survey. Geologists, mining engineers and mineral economists from within these agencies could act to supplement the tribes' own expertise. Inter-tribal organizations have the opportunity to expand and improve expertise available to tribes by setting up a personnel pool of negotiators, tax attorneys, mining economists, geologists, mining engineers and others who could work with the information pool and be able to advise tribes on short notice. An inter-tribal organization would be able to better afford the needed expertise and would provide each tribe with access to the information and experience gained by such experts. Two kinds of pools could be set up; a permanent pool of experts who would only be responsible to the tribes and an additional pool of individuals who would be called on only for their specific expertise or for specific situations. The current imbalance of information and experience could be partially bridged through this kind of inter-tribal cooperation. Additionally, the extensive network of corporate operations, expertise and markets would be partially offset by intertribal cooperation with connections to international organizations.

Market conditions favor the mineral owner. The fact that a significant percentage of all uranium supplies and operations are on Indian lands and that all of the known supply may be needed to meet world demand, give the tribes a good bargaining position. Current high prices, and predicted future higher prices indicate that there will be a great deal of surplus to bargain for. A tribe which has a significantly valuable uranium reserve will have a strong bargaining position. However, it would be better if inter-tribal cooperation is undertaken. Looking at the data on corporate ownership of reserves and production one can see that most of the companies own a significant share of the uranium supply and are thus able to bargain from a position of considerable strength. 1

is only fair that tribes be able to bargain on similar terms by consolidating their position through inter-tribal cooperation. This of course does not mean that price for Indian uranium is to be set, but rather that tribes will have the opportunity to equalize the amount of knowledge they have in relation to the company.

Much of the flexibility of the bargaining power of tribes depends on the resolution of the problems of State taxation. Legally the question has not been resolved when the tax in question involves a lease-hold interest; that is when the reserves are leased. In the case of other kinds of agreements such as service contracts (the tribe owns the operation and hires a company to mine it), it is not clear whether taxation is possible since no tribe has yet produced under such arrangements.

Other factors which would seem to improve the bargaining position of tribes include: The fact that Indian uranium reserves have several advantages over foreign uranium which would be needed to replace it. Indian reserves are much closer to U.S. nuclear centers resulting in lower transportation costs. Uranium from foreign countries also would be less stable sources of supply. Reserves in Namibia and South Africa are threatened by war. French African, Canadian, and Australian sources run the risk of being nationalized. Australia may prohibit the development of reserves for environmental reasons. In addition, there will be more intense competition for overseas reserves than domestic reserves, possibly resulting in much higher prices.

The price of uranium can go much higher without significantly affecting nuclear power costs. For those reasons higher prices, and better terms with owners, would be more attractive to companies since these moves may not affect demand.

Tribes don't have to take the first offer a company makes. There are a number of companies who may be interested in developing and the deposits may be worth more to some companies than others. Unfortunately, it appears that companies are refusing to compete for bids (as stated earlier).

If measures are taken to increase the knowledge and expertise of uranium owning tribes, they could have the bargaining power to gain from development.

## INDIAN URANIUM: THE CURRENT SITUATION

### Section 6

Under the management of the Department of Interior, the agreements between mining companies and tribes have amounted to blatant exploitation.

Tribal decision-makers are bound by the fact that they don't know the value of the resources under their land. As a result they are unable to plan development. Mining only becomes an option when a company comes in with their vast amount of data, charts of expense and says we want to develop here. The decision to develop thus becomes one which is stumbled on by chance without planning.

The financial returns tribes receive from mining have little to do with the value of uranium. They are arrived at by simply subtracting a certain percentage from the production value of the uranium. Thus the tribe's financial share is treated as just another cost to the company. The results are that the real costs are never computed and the real value of the tribe's natural resource is not returned to them.

All current agreements are leases or concessions where the mining companies make virtually all decisions more or less taking physical possession of the area being mined and the resources at a minimal cost. According to the Federal regulations (25 CFR 171.15) uranium leases must provide a royalty of at least 10% of the value at the nearest shipping point, of all ores, metals, or minerals marketed. The FTC report on, "Minerals Leasing on Indian Lands" examined several of the leases. None exceed the 10% payments specified in 25 CFR. The two

Spokane leases and the Anaconda leases on the Laguna Pueblo reservation prior to June 1, 1962, employ a royalty schedule which gives them a percentage of the crude ore value that ranges from 10-18%, depending on the amount of U<sub>3</sub>O<sub>8</sub> in the ore. The average will probably amount to 12 or 13%.<sup>65</sup>

According to Wright Sheldon, of USGS's Office of Royalty Accounting, on most leases on Indian lands the production value which the royalty percentage is based on may have little to do with market value or the revenue the company receives. Rather, the value is based on a formula designed and developed by AEC, known as Circular 5. It is primarily based on the value of the ore at the time of circular 5, which was issued at a time when prices were very low. Since then, prices have skyrocketed, thus production value represents an archaic under-representation of the real market value.<sup>66</sup> Uranium tribes have lost a great deal of income in royalties.

In response to an inquiry on the computation of royalties and Circular 5 the Undersecretary of Interior replied, "None of the Indian leases which produced in 1975 required royalty to be paid on the actual sales price of uranium concentrate, but provided that the value of uranium ore for royalty purposes be determined on a schedule published in Atomic Energy Commission's Circular 5. The value compiled for royalty purposes under this circular is quite different from the actual sales value of uranium concentrate. The reason for this is that the AEC Circular 5 pricing schedule was initiated in the 1950's when the government was the only purchaser of uranium. Since that time, the commercial market for uranium has grown and the value has risen appreciably".<sup>67</sup> Unfortunately, until 1976, Circular 5 continued to be used to compute royalties.

In 1975, 1,006,398 tons of uranium ore or 2,000 tons of U<sub>3</sub>O<sub>8</sub> (an approximate average mill recovery rate of .9) was mined from Indian lands. The United States Geological Survey's Office of Royalty Accounting reported that the 2,000 tons of uranium mined from Indian lands was sold at a value of \$16,938,532, and that the tribes received an average royalty of 15.7% of that amount of \$2,663,798. At this point there is no apparent problem with these facts unless one considers what the average price of uranium per pound was in the year 1975. Uranium sold for immediate delivery sold at an average price of \$30 per pound, and the average price of all uranium sold (this includes uranium which was delivered under the terms of contracts agreed to years ago) was \$10.70. However, examining the average price of uranium sold from Indian lands, you will find that it is only \$4.30 per pound. Tribes received an average of 66¢ per pound in royalties from that uranium.

Table 13<sup>68</sup>

Average Price per Pound of Indian Uranium (from which royalties were computed)	\$4.30
Royalties Received in Dollars per pound	.66
Royalties Received as a Percentage of Sales Price	15.7%
Average Price per Pound of all U.S. Uranium	\$10.70
Royalties Received in Dollars per Pound	.66
Royalties Received as a Percentage of Sales Price	6.2%

Sold: Not under Previous Contract .....	\$30.00
Royalties Received in Dollars per Pound .....	.66
Royalties Received as a Percentage of Sales Price .....	2.%

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Uranium mined from Indian lands have been sold at prices which are on the average only 40% of the U.S. average price and 14% of the spot market price. If this same uranium was sold at the U.S. average price and tribes still averaged a 15% royalty then they would be receiving an average of \$1.60 per pound, or \$6,080,000 in royalties. Using the spot market price it would pay \$4.50 per pound or \$17,100,000 in royalties. Obviously, Indian uranium has been sold at prices much lower than uranium produced in other areas.

When these facts have been pointed out to Department of Interior officials they have responded by stating that such inconsistencies are due to the accounting methods used. Royalties are computed on the basis of the value of the ore at the mouth of the mine, rather than on the sales price of the uranium, or they are computed on the basis of Circular 5, unrelated to current prices. *Regardless of how royalties are computed, if the tribe is not being compensated for the value on the market of their uranium they are being cheated.* No matter what, no magical accounting system is a valid excuse for cheating tribes out of the value of their uranium. In addition, tribes should not be held responsible for marketing misjudgments of companies when their minerals have been leased. Leases should provide that tribes receive the market value of their mineral, regardless of the sales price companies may be forced to sell the mineral and because of bad marketing arrangement. In the case of leasing (not true in joint ventures or service contracts), all responsibility for marketing rests with the company.

*The problem here is the relationship between price, marketing, and the uranium owner — the tribe.*

Many developing nations have experienced similar discrepancies between the sales price of raw materials from their lands and the fair market value of the commodity. Due to lack of understanding of pricing and marketing, this situation has gone on for a number of years. However, the recent trend is for nations to demand that their advisors be able to approve or disapprove of the marketing and pricing system under which their raw materials are sold. In the case of the Indian tribes, the trustee has the responsibility to insure that the price at which Indian owned commodities are sold reflect the fair market value.

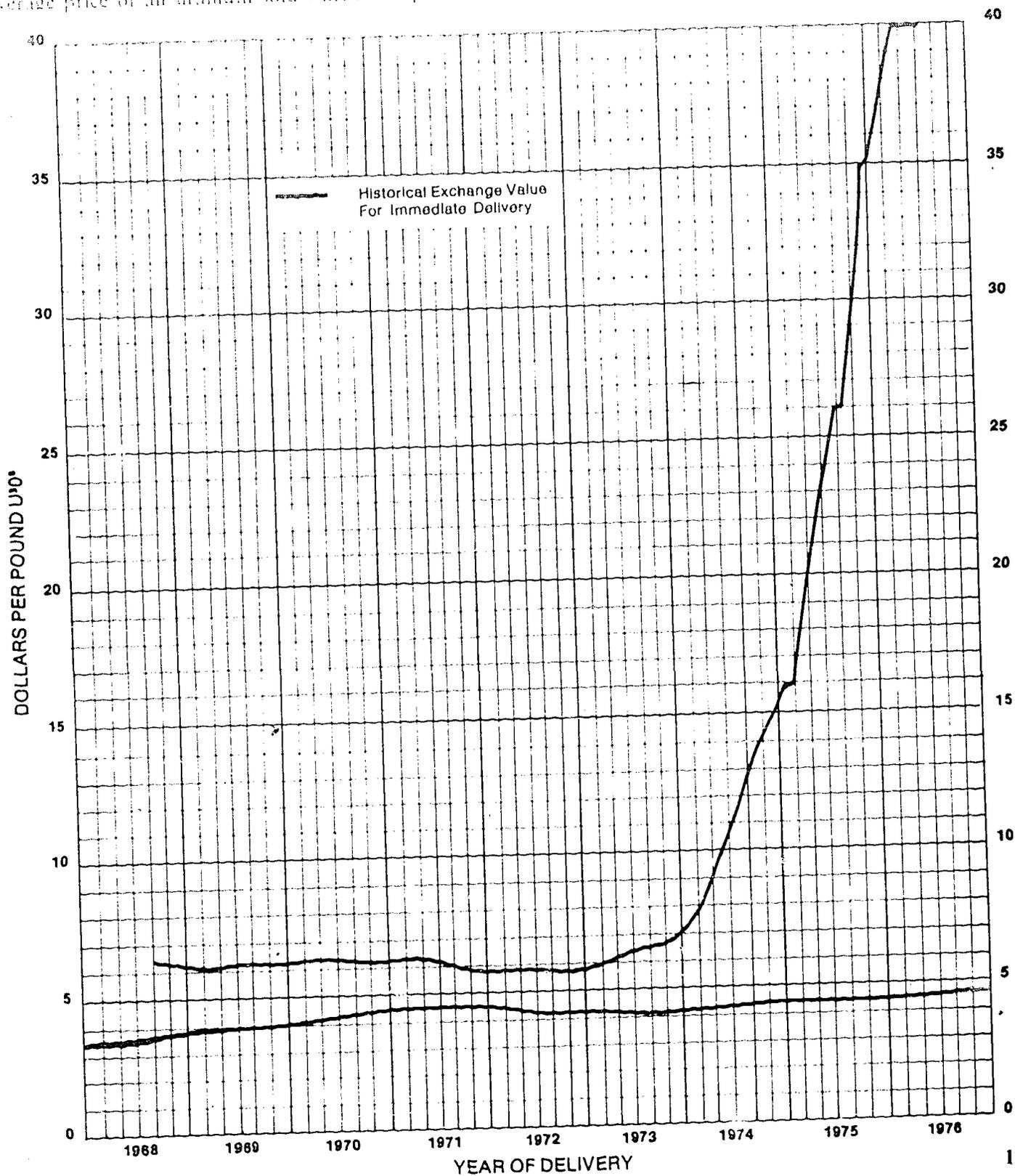
The current system used in most Indian mineral agreements is a leasing system based on a percentage of the production value. Leasing systems have many inherent disadvantages. First of all the percentage royalty does not take into consideration what are known as "windfall profits." According to mining consultant, Steven Zorn, "If, for example, a mine makes very high profits, reflecting the difference between its operating and capital costs and the price of the mineral on the market, even percentage royalties will usually return only a small proportion of that profit as surplus, to the resource owner, *yet most of the high profits actually reflects the basic value of the mineral itself, not any special skill on the part of the mining company.*"<sup>69</sup>

Profits also rise substantially after a mine has operated for a number of years. When a company projects the profitability they expect to get from a particular development they account for all capital and development cost for the first 15 years. In general, after that time almost all of the revenue is profit, since most of the costs enter in at the exploration and development stage. After a 15-20 year period, windfall profits became the majority of the profits. In the case of the Jackpile mine at Laguna which has been operating nearly 25 years, it seems reasonable that the great majority of those profits should go to the tribe rather than merely 15% of the mine mouth revenues. Most of the revenues at this stage of the game are probably profits.

The high profit margins and rapidly escalating prices involved in uranium sales make the need for more appropriate agreements even more necessary (see section 5). The very high profits which may be realized by uranium mining companies in the future is more a reflection of the increased value of the uranium rather than the technological and marketing skills which the companies possess.

FIGURE 3

The top line is the average price of all uranium which was sold for immediate delivery. The lower line is the average price of all uranium sold which was produced from Indian lands. The discrepancy is ridiculous.



Secondly, leasing systems do allow for little or no tribal control over the development. The development remains a distinct non-Indian enclave who in practice owns and controls the Indian land and resources until they are entirely depleted. Decisions which will affect the people, culture, health, and economy of the tribes are not made by the tribe, the people who will be directly affected.

As long as uranium mining and milling is controlled by outside corporations who don't have to pay the costs of environmental and health impacts, uranium will be an extremely dangerous and destructive form of resource development.

Uranium mining and milling more than any other kind of mining development is characterized by often extreme health and environmental hazards.

A great deal of data has been accumulated on the *effect of uranium mining on miners*. For over 350 years, it has been well known that the extraction of radioactive materials frequently results in lung cancer and other health hazards. Prior investigations in Europe on the effects of pitchblend mining on miners resulted in findings of extreme numbers of cases of premature lung cancer in mining areas.

The main problem in investigating the effects of carcinogenic materials is that often effects do not show up for as long as 20 years. For that reason, mining companies have been able to argue that it is impossible to determine the effect of radiation on miners. However, the clear historical picture shown by investigations in Europe completely refutes their argument.<sup>70</sup>

In a study of Navajo miners who worked at a now abandoned Kerr-McGee mine, scientists have found that of 100 miners, 18 have already died of lung cancer and radiation induced illnesses. Twenty-one others have developed malignancies and other symptoms.<sup>71</sup>

In an extremely comprehensive study of 3,400 uranium miners (780 Native Americans) over a 20 year period, findings were similar to the Navajo study. "An excess of 67 white subjects died of malignancies, most of which are lung cancers. Scientists have estimated that the excess of lung cancer among the group must be of the order of 100-200. Predictions of 600-1,100 excess\* lung cancer deaths due to irradiation have been made for this group."<sup>72</sup>

Other reports have indicated that extensive exposure to radiation through uranium mining has resulted in the premature death of one out of every six miners for lung cancer or radiation related illnesses.<sup>73</sup>

Clearly if employment is one of the benefits to be gained from mining and milling then such a drastic health risk is a tremendous cost to pay. Only if the tribe can insure that the health and safety of miners can be guaranteed and enforced can this cost be accounted for.

This problem is of the highest priority because a high percentage of tribal members are employed in uranium mining. Currently, at Laguna Pueblo, where the total labor force is 970, there are 630 employed individuals and 340 unemployed; of the employed 447 work in the mines. Since 1953, when the mine was begun, the number of Laguna members who have worked there for a period of time is probably twice that. Currently, one out of every five persons at Laguna Pueblo, one out of every two in the labor force, and five out of every seven working Laguna people work in the mines. On the Spokane reservation, Newmont Mines employ 25 tribal members and Phelps Dodge's Western Nuclear is under tribal contract to employ at least 100 members. That amounts to one out of every ten tribal members working in the mine, and that one out of every four persons in the labor force will be engaged in uranium mining at some particular time.

\* Excess means deaths above and beyond what one would normally expect from a group.

Another risk and cost to the tribe is the *effect of mining and milling on the surrounding community*. In the village of Paguate at Laguna, where the village sits right next to the Anaconda Jackpile mine, dust from the tailings and uranium blows across the town. Winds and blasting have the effect of leaving radioactive dust all over the village. According to Laguna Councilman Frank Aragon, "You don't know what it is doing to our health, especially to our kids and babies later on, with all the nitrates in the air and uranium stockpiles blowing all around Paguate. It will soon be March and wind will really start blowing. People here dry their meat outside and dust settles on it. The uranium gets into our lungs and the food and our people."<sup>74</sup> In this case and other similar ones, the community is threatened with the same dangers faced by miners.

Mill tailings are considered the great environmental and health risk from uranium mining. According to James Martin of the Environmental Protection Agency's Waste Environmental Standard Program, mill tailings "may actually present the greatest environmental impact of all waste problems in the long run."<sup>75</sup> Tailings piles which remain after mining or milling pose as an environmental threat for centuries. Dangerous emissions from the piles include:

- Radon-222, a radioactive gas which diffuses from the piles into the air. The end results of exposure to radon is usually diseases such as leukemia or lung cancer. Winds carry the dangers of radon over a widespread area.
- gamma radiation exposure
- exposure to alpha emitters, Thorium-230 and Radon-226 which can result in exposure to bones and lungs through inhalation or ingestions of wind-blown tailings.
- ingestion of ground and surface water contaminated with radioactive elements.
- contamination of food through uptake and concentration of radioactive elements by plants and animals. Radiation from tailings blown by the wind or carried by water can lead to long-term contamination affecting food chains for a long period of time and often over a wide area.

In addition, there are non-radioactive pollutants which can have a profound health and environmental impact. Tailings piles are known to contain arsenic, barium, vanadium, lead, selenium, cadmium and chromium concentrations. Samples taken of groundwater around mining areas frequently reveal dangerously high levels of these contaminants.

Mill tailings have often been carried off and used as landfill and building materials. In Grand Junction, Colorado, the U.S. Public Health Service found that building firms have been using tailings for landfill infecting 5,000 inhabited buildings with extremely high levels of radioactivity.<sup>76</sup> This has also been known to occur at Laguna Pueblo and on the Navajo reservation, although little action has been taken to determine the extent of the hazards which may be present at those locations. It is probable that there are other occurrences elsewhere.

Monitoring of surface and ground water near mining and milling sites for radiation and other contaminants has almost been non-existent. What studies have been done indicate that such pollution may be widespread. Contamination of water supplies occurs generally from:

- run-off or discharges from tailing piles into streams and onto the ground, later percolating into the groundwater.
- water drainage from underground mines.
- seepage from tailings ponds into the groundwater.
- seepage of rainwater, streams, and underground water through orebodies disrupted by underground mining and into the groundwater.

In the late 1950's it was discovered that a number of streams running into the Colorado River were badly polluted and that drinking water from the Colorado River and its tributaries was contaminated by radioactive

streams.<sup>77</sup>

In 1976, the Environmental Protection Agency conducted a water supply study of the Grants-Laguna area. The study concluded that among other things,

- rainfall and run-off at the Laguna-Jackpile Mine (Anaconda) resulted in the eroding of uranium and selenium rich materials into the Rio Paguete making it unfit for domestic, livestock, and irrigation use.
- there is no monitoring of the effects of mining on Laguna's water supply.
- drinking water at the Laguna Mine well was unfit for consumption.
- seepage from tailing piles is occurring.<sup>78</sup>

In the case of solution mining there are often more extreme risks of contaminating the drinking water. There is absolutely no way to determine if the injected solutions will migrate into the water supply bringing with them high concentrations of radioactive agents. Health physicists have already found that solution mining in South Texas has resulted in drinking water radiation levels of over 50 times the recommended limits.<sup>79</sup>

As is the case for water there has been virtually no effort to assess the presence and effect of radiation and other contaminants in the air surrounding mining and milling areas. The limited amount of air monitoring which has been done has revealed that radon, particulate matter and other gases are escaping into the air from mine ventilation shafts and from tailings piles. Many experts believe that wind currents carry the risk over a hundred miles.

The Environmental Protection Agency investigations on the effects and extent of airborne radioactive gases has concluded "radon-222, a difficult to control radioactive noble gas and its daughter products is the most significant hazard to people living in dwellings near uranium mill tailings in eight western states." The report adds that "the radon-222 rises to the surface of the pile and escapes into the airstream above. The wind carries the radon-222 into nearby dwellings and buildings where it remains long enough to form a series of radioactive decay products. The radioactive daughters of radon-222 when inhaled by people in the dwellings results in radiation doses to the lung tissue." A second way in which people are exposed is from radionuclides which are lifted from the surface of the tailings piles by the wind. When inhaled, these particles stick to the passageways of the lungs leading to high risks of lung cancer. A third method for exposure to radiation from tailings piles is from emission of gamma radiation. These rays penetrate the material covering the pile and interact with the body tissues of humans nearby.<sup>80</sup>

One of the main dangers and economic costs of uranium mining and milling is the tailings piles which remain for centuries after the mine or mill is closed. If measures are not taken to stabilize the piles one runs the risk of continued water and air pollution over a long period of time. In the case of mill tailings 80% of the radioactivity of the uranium remains in the tailings.

In 1977, ERDA completed a series of reports on the condition of four mill tailings piles from inactive mills on the Navajo reservation. The mills were:

- El Paso Natural Gas Mill — closed 1966, Tuba City, Arizona
- Atlas Corporation Mill — closed 1965, Mexican Hat, Arizona
- Kerr-McGee Mill — closed 1968, Shiprock, New Mexico
- Vanadium Corporation Mill — closed 1968, Monument Valley, Arizona

The reports all concluded that tailings piles offered significant health threats to the surrounding area and that actions necessary to stabilize the piles would cost up to \$21 million for proper stabilization. Unfortunately,

after the mill was closed the companies involved assumed no responsibility. It then became that of the Navajo Nation.<sup>51</sup>

While cumulative royalties of all uranium production on the Navajo reservation has not equalled one million dollars, the tribe is stuck with a cost of 21 million dollars to properly prevent further environmental damage. Clearly the long term economic costs must be carefully considered before any mining agreements are signed. Costs are measured not only in dollars, but in terms of human health and natural environment.

The most overwhelming realization from examining the health and environmental effects of uranium mining is that these effects were never assessed before the mining began. No attempt was made to determine what would happen to the miners, the air and water, the environment, and what kinds of reclamation costs there would be, before the mining began. Attempts to assess these costs have been minimal, and only recently has there been any sort of a monitoring effort. If tribal decision-makers are going to be serious about looking after the needs of their people, they must now make a major effort at examining the costs and benefits of development. They must do this before any further development is allowed. The consequences of inaction could be frightening. Known health and environmental dangers for uranium mining and milling are profound, however, it is not yet possible to assess all of the dangers. Nuclear science is not yet advanced enough to know all of the effects of radioactive substances. There has been no long-term monitoring of water and air and the effects of contaminants on people. The danger could very well be greater than one can imagine.

Uranium mines last on an average of 9-12 years (there are of course exceptions, the Laguna-Jackpile mine will have had a life of 30 years before it expires). Uranium is a non-renewable resource. Once it is gone it is gone forever. Even the uranium rich Grants Mineral belt will probably be depleted of reserves by the year 2000. Clearly, one cannot depend on income from uranium mining for regular revenues or per capita distribution, for when the mine runs out, all revenues will stop. This fact brings to attention two other costs of uranium development to a tribe considering development.

1. *Boom and Bust:* While the mine is being constructed and while it is in operation there will be a need for an infrastructure to accommodate the boom. Housing, schools, doctors, water, transportation, and highways will be needed. There will be a dramatic increase in the number of people living in the area, and dramatic increase in the amount of wealth people will have to spend. Then when the mine shuts down, there will be a bust. There will be a dramatic decrease in the number of people as people leave to seek work elsewhere. All of the money the tribal government spent for infrastructure will be lost as it will no longer be of any use. Tribal governments, as seen in looking at the cost to the Navajo tribe for stabilizing long-term environmental consequences of the mine will still have costs to pay. Land which could have been used for agriculture or grazing may be lost for use forever. If reclamation is possible, as might be the case, in less arid areas such as Northwest Washington, the use of land for other purposes is threatened by exposure to radioactivity.

2. *Reconversion Costs:* While mining is going on, the tribal government will be spending a great deal of money in administering and monitoring the mining operations. As a result, other ventures may be subordinated to some degree, especially when the tribe does not have a large administrative sector. When the mining ends, the personnel, energy, and funds that were previously involved in the mining sector must be converted to use in other areas. Additionally, the time and effort that could have been spent in developing other resources will have been lost and other ventures will be that much further behind.

One of the possible benefits that could accrue from uranium mining is jobs and job training. Ignoring the health risks, job skills could be very useful if they could also be utilized in other fields on the reservation when the mine runs out. If they can't be utilized in such a way, it could be that half the tribe's labor force is trained in mining, with their lifetimes work experience in mining, facing the fact that at their age and with their skills they can no longer stay on the reservation to work. They must go elsewhere where mines are in operation. Uranium mining is usually a temporary venture and one of the greatest dangers is being left in a situation where you have a nation of miners and no mine.

Development of uranium reserves can provide tribes with revenue which they can use to upgrade services to tribal members and could also provide tribes with capital which could be used to build up permanent renewable resource projects.

Environmentalists who oppose all uranium mining projects under any conditions have little understanding of the economic situation of Indian nations. Currently, health, social, food, and housing conditions on most reservations are the worst in the nation and federal attempts to alleviate this situation have been inadequate and mired in red tape. Other kinds of economic enterprises may be difficult or possible to undertake because of lack of capital and credit. Bureaucrats respond by offering their own predetermined solutions and ignoring the tribes set of priorities. It may be true that capital generated from mining projects could give the tribe independence in planning and could provide the investment funds necessary for developing other kinds of enterprises.

Development should be closely examined analyzing costs and benefits. Not only short term economic costs but also long term costs such as environmental degradation and health risks to the community. However, the main issue involved as to develop or not is not whether uranium mining is inherently dangerous or whether or not development will ultimately lead to economic exploitation. The real issues are:

1. Who will control the development?
2. Who will profit from it?
3. Who will pay the costs?

Currently development is corporate controlled, the vast majority of the profits go to the corporations and the long range costs are paid by the tribes and surrounding communities.

Control effectively allows corporate decision-makers to distribute their profits in the way they see fit. It also allows them to cut their costs in areas where they don't have to pay them; such as safety devices and pollution controls. Controlling the marketing, bookkeeping and other decision-making areas allows companies to reduce the royalty (or joint venture, taxation) profits that should go to the tribe. According to mining consultant, Steven Zorn, "What you may find in dealing with large integrated firms is that there aren't any profits. They may sell the minerals to an affiliated company or to another company under a reciprocal agreement and take their profits elsewhere in the company chain. In purchasing goods for the operation they may buy from an affiliated company at overly inflated prices and push up costs that way. The end result is the elimination of profits in the tribe's piece of the operation while preserving them for the company elsewhere in their business."

Health and environmental hazards exist because corporations are able to control the rate of development, realize their profits, while avoiding payment of the health and environmental costs. Costs which over a period of years can be enormous. Corporate decision-makers don't have to live among contaminated air and water and in communities stricken with the extreme risks of lung cancer and other health hazards. Only the people of the tribe do. Clearly development cannot result in anything but exploitation, until costs are fairly accounted for and profits fairly distributed.

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<sup>1</sup>Reserve Data for all entities except American Indian from Organization for Economic Cooperation and Development "Uranium a Joint Report", 1976, Paris, p. 24, Indian Statistic from Eugene Grutt, Manager ERDA Grand Junction Office, letter to AIO, September 22, 1976, Grand Junction, Colorado.

<sup>2</sup>Federal Energy Administration, Office of Consumer Affairs, statement at Indian Energy Meeting, Washington, DC, January 1977.

<sup>3</sup>Production figure for all entities except American Indian from Energy Research and Development Administration, Uranium Supply Evaluation, April 1977, Washington, DC. Indian Statistic from Eugene Grutt, Manager ERDA, Grand Junction, Colorado, Letter to Americans for Indian Opportunity, Grand Junction, Colorado.

<sup>4</sup>Lipton, Charles, Lecturer, "Dealing with Developers", at Americans for Indian Opportunity Seminar, Indian Tribes as Developing Nations held, September 21, 1975, in Racine, Wisconsin.

<sup>5</sup>ERDA, Uranium Industry Seminar, Volume 2, October 19, 20, 1976, Grand Junction, Colorado, p. 159.

<sup>6</sup>Grutt, Eugene, "Letter to AIO on Indian Uranium", Grand Junction, Colorado.

<sup>7</sup>Secretary of Interior, Southwest Office, *Status Report: Uranium Development on Federal and Indian Land, Northwest, New Mexico Act*, September 1976, Albuquerque, New Mexico.

<sup>8</sup>Ibid.

<sup>9</sup>Data under this section is excerpted from several publications:

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<sup>10</sup>Ibid., U.S.G.S. Memorandum.

<sup>11</sup>Op Cit Footnote #7

<sup>12</sup>Saucier, *New Mexico Uranium Newsletter*, February 1977, Cedar Crest, New Mexico 87008.

<sup>13</sup>ERDA, *NURE Preliminary Report, 1976*, Grand Junction, Colorado.

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<sup>15</sup>Bureau of Indian Affairs, "Mineral Inventory Program", Office of Energy and Minerals, Washington, DC 1976.

<sup>16</sup>Americans for Indian Opportunity, *Hard Choices: Non-Replenishable Resources*, 1976, Albuquerque, New Mexico p. 7.

<sup>17</sup>*National Uranium Resource Evaluation, Preliminary Report*, GJO-111 (76) June 1976, Energy Research and Development Administration, Grand Junction, Colorado.

<sup>18</sup>Uranium Exploration Expenditures in 1976 and Plans for 1977-1978, U.S. Energy Research and Development Administration, May 1977, Grand Junction, Colorado.

<sup>19</sup>Weed, Herb, "Uranium Supply: A Producers View," Paper presented to National Uranium Resource Evaluation Seminar, 1976, Phoenix, Arizona.

<sup>20</sup>Liebmann, "United States Uranium Resources", *Science*, April 1976, p. 432.

<sup>21</sup>Survey of Lands Held for Uranium Exploration, Development and Production, Bendix Field Engineering Corporation, Jan. 1, 1977, Grand Junction, Colorado.

<sup>22</sup>Ibid

<sup>23</sup>Les Gopay, "Carter May be Right in Predicting Outcry over his Energy Plan" *Wall Street Journal*, March 24, 1977, p. 2.

<sup>24</sup>Emanuel Gordon, "Uranium - Rising Prices Continue to Spur Development Activity", *Engineering and Mining Journal*, March 1977, p. 198.

<sup>25</sup>Les Gopay, *Ibid*

<sup>26</sup>*National Energy Outlook*, Federal Energy Administration, 1976, Government Printing Office.

<sup>27</sup>*Uranium Industry Seminar*, Energy Research and Development Administration, Grand Junction, Colorado, 1976, p. 55.

<sup>28</sup>Federal Energy Resources Council, *Uranium Reserves, Resources, and Production* 1976, Washington, DC.

<sup>29</sup>Organization of Economic Cooperation and Development, *Uranium: A Joint Report*, 1976, Paris.

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<sup>39</sup>Lens, Sidney, Op. Cit. p. 32

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<sup>41</sup>*Ibid*, p. 33.

<sup>42</sup>Federal Trade Commission, *Concentration in The Energy Sector*, Washington, DC, 1974, p. 36.

<sup>43</sup>Paine, Webber, Jackson, Curits, Inc. "Uranium and Nuclear Power Outlook", Portfolio Managers Summary, New York 1976, p. 5.

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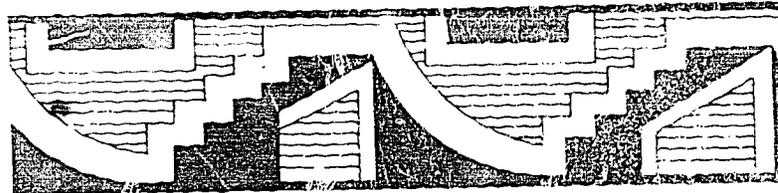
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- <sup>78</sup>Report of Ambient Outdoor Radon and Indoor Radon Progeny Concentration, During November 1975, Environmental Protection Agency, Las Vegas, Nevada, p. 21.
- <sup>79</sup>Op Cit., Mackenzie.
- <sup>80</sup>"Potential Radiological Impacts of Airborne Releases and Direct Gamma Radiation to Individuals Living Near Inactive Uranium Mill Tailings Piles", January 1976, United States Environmental Protection Agency, Washington, DC.
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CHAPTER 15  
CONSIDER THE IMPACTS  
*"Deciding not to decide is a decision"*

All of us make decisions every waking minute of our lives. Mostly they are unconscious decisions - that we decide what to do from one moment to the next without thinking consciously of the effect a particular decision will have. Take smoking, for example. When a person starts smoking, he/she makes a conscious decision to smoke. Then it becomes a habit. Everytime a smoker lights another cigarette, he makes a decision to continue smoking, but it is no longer a conscious decision. He doesn't think about it. He doesn't see "Warning" signs on the pack any more. Only when he realizes that it's costing a dollar and a half a day or develops a cough or cancer or heart disease does he begin to be conscious of the impact smoking has on his life.

Tribal decision-makers can easily fall into the habit of making decisions without considering the impacts or the real costs of their decisions. For example, most of the Indian community saw the Indian Self-Determination Act and the possibility for tribes to contract service delivery programs from the Bureau of Indian Affairs and Indian Health Service as a big plus for the tribes. It was and it is. But there are some minuses that go with the pluses. A lot of those were not foreseen. For instance, there is the cost of the overhead involved in running the programs. The Council is responsible for seeing that the programs are administered properly. The Council may or may not be a paid council. If it is a paid council, the money has to come from somewhere to pay council members. If it is not a paid council, then the members have to make their living doing something else and they aren't available when crucial administrative decisions have to be made or to make the trips to funding agencies. Nor is there usually a staff available to the Council to properly advise them on crucial decisions. They have to rely on Program Directors who have a vested interest in pushing their own program rather than taking an overall look at the needs of the tribe. Programs build up their own constituencies through jobs or services delivered and factions are born. Programs become the tail that wags the dog. Actually it becomes more like a dog with many tails all wagging independently.

The situation is not unique to tribal governments. Every unit of government including the Federal government has similar conflicts. It is just so much more personal and more visible in tribal governments (Author's apology: Governments, tribal and otherwise, may not like being compared to dogs. You may have noticed that my mind and therefore my writing runs toward graphic descriptions. Besides, some of my best friends are dogs -)

Tribal decision-makers can improve the chances for maximizing the benefits and minimizing the harmful effects of the decisions they make by carefully considering the impacts. This applies whether the decision is to seek a grant or a contract, to start a business enterprise, to assume the management of their timber or to develop a coal mine.

Most tribes are and have been in a life crisis for as long as anybody living now can remember. They are always looking for something to help them - their people - make it through the night. Every court decision, every new piece of legislation, every change in administration, every new program offers some fear or some hope that things will get better or worse. There has been a proliferation of government programs for which tribes are eligible. Many have proved to be tremendous assets. Others have not. Some programs or projects could have been assets if they had been handled differently. Others were, from the beginning, designed to fail.

### **How Do You Know What The Impacts Will Be?**

It is impossible, of course, to know what all the impacts of any given decision will be. There is no one easy answer. Every tribe will have to develop a system for analyzing decisions that works for it. A basic check list might look something like this.

1. *What is the need?*
2. *How will the proposed action meet the needs?*
3. *Are there alternative ways of meeting the need? What are they?*
4. *How does the proposed action relate to the overall goals of the tribe?*
5. *Where does the proposed action rank in the priorities of the tribe?*
6. *What will it cost?* This is one of the most difficult appraisals to make and the one where people most often get in trouble. Be sure to include all the related costs in your planning, even if you don't put them in the proposal itself. It may be acceptable to delude your funding sources, but it is foolish and sometimes disastrous to fool yourself. For example, suppose your tribe decides they need a museum. This has been a very popular and legitimate need and desire for many tribes. The cost of the building itself is only the beginning. Just for the example's sake, let's say a tribe is able to figure exactly the cost for building the building itself from the first architectural drawings until the last nail is driven including the preparation of the site. This, by the way, is next to impossible with the rapidly changing costs of materials and labor. What other things should be considered?
  - a. **Operating costs.** It doesn't do much good to have a museum if it is not going to be a living, breathing viable part of the community providing cultural enrichment and stimulation to adults and children alike. For starters, you've got to have exhibits and someone to prepare them. This requires special skills and knowledge. Is there a tribal member who has talent and training? How much will it cost to get that person to do the job? Is there a tribal member who has the talent and interest but lacks the training? How much will it cost and how long will it take to train that person or persons? How much will it cost to hire an outsider if no tribal members are available? Where will that person live? If that person has a family, what are the implications of bringing that family into the community? How much will the utilities cost? Museum exhibits require controlled heat, humidity, light, etc. Can you project the costs for these services? Janitorial services must be provided and they must be specialized since exhibits must be treated with tender loving care. Maintenance must be figured in. Things do wear out and things get broken. The more people who use the museum, the more janitorial and maintenance services will be required. You must have security. The exhibits are valuable as is the building and equipment. They must be protected. All this requires a great deal of record keeping and other administrative activities. How much is that going to cost? There must be supervision - the tribal council will be required to

spend a certain amount of its time overseeing that activity. How much time will that take and what is the value of that time? Financing for all these costs must be arranged and that, too, will cost money. One plan for the financing might be for the museum to be self-supporting through admission charges, or an arts and crafts resale shop, or a lunch counter. All those things require people to run them and have a set of costs all their own. What about insurance - for the buildings, exhibits, equipment, employees, etc.? And what about liability insurance for the visitors. Accidents do happen. If a custodian forgets his mop bucket and a tourist steps in it, falls and breaks his back, there is a possibility that the tribe or the museum would be liable. Where would the injured person receive emergency treatment? Yet another cost is legal counsel when you need it.

If you're going to look for grants or contributions to support the museum, then you are going to have to have a fund raiser. If you're going to support it out of tribal funds, then you are going to have to weigh the merits of the museum against other tribal needs which may or may not be more pressing.

b. **Related costs.** How many outsiders are going to be attracted to the reservation because of the museum? Where will they park? What effect will this have on the roads, on the traffic, and on the habits of the people in the community? How will traffic be controlled? Who will provide the policing service? What about jurisdiction? What if a car load of drunks decides going to the museum would be a really neat thing to do and they become rowdy and disruptive - or destructive? What if the kids in the community are usually safe riding their bicycles or playing their football games in the streets because the people who live there are accustomed to it and know to take proper precautions? Outsiders won't know it and they won't be as careful or as tolerant of local habits. Where will the kids play and how will they be protected? Who is going to clean up after the tourists? Cigarette packages, pop bottles, beer cans, sandwich wrappers, etc., have to be cleaned up. Even if everybody puts them in the proper receptacle, who's going to pay for the trash cans, who's going to empty them and where will they be emptied?

7. *What is the economic impact of the proposed action?* Will it provide new jobs for the community? Or will outsiders be hired? Will the new jobs require skills or demand salaries out of line with the economic structure? One of the major problems emerging from the increasing number of tribal programs is that an economic dichotomy is being created in the community. That is, where a tribe was employing two to five people five to six years ago, they are now employing a hundred or two hundred people. Those people employed by the tribe are, generally speaking, better paid than the majority of the rest of the community. The members of the Council may or may not be paid for their services. If they are, chances are some of their employees are receiving higher salaries than they are. The tribal member employees of the tribe receive all the benefits that the rest of the community receive. They can use the health facilities, education facilities, the police protection etc., and they can live among their families and friends. The same is true of tribal members who have started their own businesses. The people who remain unemployed or who must drive off reservation, sometimes long distances, come to resent their more affluent brothers, largely because there is no system for the redistribution of wealth as there was before economic systems of by-gone days were disrupted. This is clearly one of the reasons for so much political unrest within tribes. That is, many tribes experience a constant factional battle between those in power and those out of power. In most cases, it is not over substantive issues, but over the fact that whoever is in brings his friends and family into those jobs. "To the victor goes the spoils". If you can get enough people dissatisfied enough, you can throw out the "ins" and put in the "outs" which is one way of redistributing the wealth, but it is disastrous for the tribe as a whole. There must be a better way. Perhaps a tribal income tax is one way. Since Indians living on their reservations don't have to pay state income taxes why not an income tax to the tribe for use in providing services to the rest of the community?

8. *What is the environmental impact on the community?* What will it do to the air and water quality? What about water quantity? The people in the community may desperately want and need a new hospital, but if they learn after the fact that because of its water usage, they can no longer flush their toilets and have to haul drinkin

water, they aren't going to be too happy. They probably would have created a small clinic and ambulance service instead.

What about noise? And smell? And garbage? Or what if the new activity is just going to be ugly? What if it's going to be radioactive?

9. *What is the impact on the culture?* When the Department of Housing and Urban Development began to build houses in Alaskan villages, they put refrigerators with freezers in them. Some salesman somewhere must still be in ecstasy having fulfilled his fantasies of being able to sell refrigerators to Eskimos. Certainly it added convenience to an individual family. But it also allowed a different kind of food storage so that the hunter no longer distributed their bounty so generously to their neighbors. They could keep more so they didn't have to go out so often. Those households without hunters who were dependent on the generosity of those with hunters began to suffer. It was an impact nobody had anticipated.

Again with housing, tribes who had traditionally lived in houses far apart from each other, for various reasons, were encouraged or coerced into building cluster housing - neat little rows of look-alikes which also turned out to be "look-intos". It was cheaper to put in sewage, water and electricity in this manner. But suddenly, people who were accustomed to wide open spaces for their own sense of themselves - mental health if you will - and for their individual spiritual relationship with their personal sense of God were living close together where they could not help but be thrown in close daily contact. The same kind of row housing arrangement was imposed on other tribes on people who had traditionally lived in very close contact - condominiums they are now called in the cities - with adjoining passage ways and common living areas. They depended on their closeness with each other for personal and spiritual reinforcement. The new housing arrangements were disruptive to both cultural patterns in ways nobody anticipated.

The Northern Cheyennes learned that if their coal was developed as planned, they would have thirty-five non-Northern Cheyennes - mostly non-Indians on their reservation for every Northern Cheyenne. The impact on their lives is obvious.

Some impacts are not so immediately obvious. Suppose your tribe needs a hospital. There are only a few non-tribal members living on your reservation and all of those are married to tribal members. A new hospital will require about fifty housing units for the doctors and other staff members because it is a long way from the closest town. It's a lead pipe cinch that most of those people are going to be non-Indian. If we are to believe in the average American family - that's a mama, a daddy, and two-plus children - that is two hundred plus non-tribal members.

This action will literally change the complexion of your reservation. Your people are not accustomed to having outsiders in their midst. Many of your religious activities are closed to outsiders. You need the hospital. Or do you? *Hard* choices.

Culture is a living, growing thing. There is no cut-off date so that you can say "Everything before 1492 or 1600 or 1776 or 1941 or 1978 is cultural. From that date forward we must do everything as before or it will not be cultural." Yet tribal decision-makers have a special responsibility to protect and nurture the language, the traditions, the history, the culture of their people, that which is past, that which is being created now - the present, and that which will be created in the future.

### Costs and Benefits

Who will receive the benefits and who will pay the costs? Ideally, both the costs and benefits would be spread equally to all members of the tribe. Realistically, this is never the case. Take, for instance, the assignment

a business. The major benefit will go to that individual - the cost is borne by the rest of the community which no longer has the possibility of using it. It may be that other benefits for the community will come from having that person have that assignment. Perhaps it is a person whose talents are very badly needed for the community - a teacher, a business manager, a biologist - who needs a place to live in order to put his or her skills to work for the tribe. It might be that that particular site has been an eyesore or a source of danger to the community and using it for a homesite - cleaning it up, making it useful - is not only beneficial to the individual but to the entire community.

But suppose that a tribal chairman or councilman or employee, because of his or her position with the tribe learns that a chicken franchise wants to put one of their stores on a particular piece of land. Suppose that person goes to the Council and asks for that assignment without telling all the facts and receives the assignment then makes a private deal with the Chicken Fryers. The tribe has no policy for a business lease or a lease for business purposes or zoning ordinances. That individual hasn't done anything illegal - unethical, perhaps - and will reap all the benefits while the rest of the tribe, which could have been receiving the money made, gets nothing but a place to buy chicken. They also bear the costs of traffic, policing, garbage pickup and a big chicken bucket on the landscape which some may not find attractive.

In the development of natural resources the question of who pays and who benefits is very crucial and more far ranging. Minerals have a way of showing up on lands which have in the past been used by cattlemen or sheepherders or in some cases, where villages have stood, for generations. There is no question that the revenue from the minerals and the jobs that will come from the mining operation are badly needed. As many as several hundred people may be employed for six, eight, twelve or fifteen dollars an hour. The tribe may receive several million dollars a year from the revenue. But what about those sheepherders and those cattlemen who are deprived of their method of making a living? And their homes where their families have lived forever. What about the people who live in that village? What about the noise, the traffic, the air and water pollution - the health hazards that result from those activities that we know very little about? What about the possibility that the miners or the people nearby will develop cancer or that their children or their children's children will have birth defects years from now as a result of the mining operation? Those are costs, too. And what about the even more far-flung effects - the Four Corners Plant causes air pollution as far away as Albuquerque? The mining and milling of uranium in the Grants mineral belt in New Mexico is causing air and water pollution and traffic problem for a hundred or more miles on either side of it. Where do responsibilities begin and end?

What about a tribe where both timber and fish are important to the economy? Improper or unthoughtful or untimely logging methods may clog streams where the salmon spawn and cut off the fishermen's livelihood. Herbicides used as a very proper part of commercial timber management may have a devastating effect on the fish and animals who share the area. Or they may kill plants traditionally used for medicines or basket-making or other traditional purposes.

No one can blame tribal decision-makers for not being able to answer all the questions or even for making the wrong decision sometimes. But future generations will judge harshly those who never *asked* the questions.



## CHAPTER 16 WHAT WILL OUR GRANDCHILDREN SAY?

*"It is not easy being a modern revolutionary hero."*  
Charles Lohat

It is easy for us to say that you don't have to be poor to be Indian or that Indians should control the development of their own resources. Even so, it has not been so easy for us to write this book. There is so much to learn. We have only scratched the surface. Since we started this project, the problems facing the Indian community have greatly increased in complexity and severity. At the same time, the Indian community has grown immeasurably in its ability to deal with them. There are dangers ahead that will require every bit of the skill, imagination, and dedication that we can muster as individuals and as a community. Those who have gone before proved that Indians could survive as a people and as groups regardless of the trials they had to overcome. The sacred trust we bear is that our grandchildren will be able to say the same.

You will note immediately that there is much that we have not covered. There is not a chapter on water, the lifeblood of everything else. Water rights is the number one issue in the Indian community, for without it, no other development is possible. The legal issues involved are so complex and so individualized that we did not feel it was appropriate for us to undertake such a statement. The one caution we would offer is that you must get your ducks in a row or your duckpond will disappear. The trend in federal water policy is that if you don't use it, you'll lose it.

It is not easy to find heroes in this day and time, however, we believe that time will show that the majority of the tribal decision-makers of the 1970's were heroes in their own ways. Theirs is a thankless job in many ways. They have had to bear the brunt of the attacks on tribal sovereignty on the outside and a tidal wave of rising expectations from the inside. Many have experienced personal attacks that have left them bitter and disillusioned. Some have deserved such treatment. Most have not. Most have been hard working, sincere people dedicated to what they perceived to be the best interests of their people.

Neither true wealth nor true poverty is measured in dollars and cents. True wealth is measured by the way you feel about yourself and is reflected in the way you feel about others. If you do your best to do your best, you will help provide conditions in which others can do their best.

Perhaps the title of this book should have been "You Cannot be Poor and be Indian." Our grandchildren will be the judges.

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Special thanks to George Crossland whose vision prompted the work on which this book is based; to Leigh Price who helped us conceptualize this project and make it a reality; to Carolyn Coon and Richard Nafziger without whom this book would never have been started and to Mary Alice Archuleta and Wes Hall without whom this book would never have been finished.



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