

## **American Indian Economic Development**

# World Anthropology

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MOUTON PUBLISHERS · THE HAGUE · PARIS

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*Editor*

SAM STANLEY

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Distributed in the United States of America and Canada  
by Aldine Publishing Company, Chicago, Illinois  
ISBN 90-279-7600-7 (Mouton)  
0-202-90078-9 (Aldine)  
Jacket photo by W. W. Herbert  
Cover and jacket design by Jurriaan Schrofer  
Indexes by Society of Indexers, Great Britain  
Printed in Great Britain

## *General Editor's Preface*

Among the indigenous peoples of the world who resist absorption into the industrializing juggernaut are hundreds of American Indian communities dotting the whole of North America. Without the resources which once enabled them as communities to adapt to changes in their own ways, individual families now have no alternative but to make their own reluctant way — usually by migrating to cities — in the cash economy. They often do not disappear into the general population, so that whatever problems there were are complicated rather than solved. Hence there are continuing efforts toward “development” in the locations of the communities themselves. Remarkably, this book is the first careful study of a sample of seven of these efforts. It provides basic and very striking lessons applicable wherever people with distinctive identities and cultures are pressured to join another people’s “mainstream” — even the best of intentions simply do not succeed. Whether or not governments heed the lessons, they are consonant with what anthropology has learned and a remarkably worldwide congress provided a forum for their presentation.

Like most contemporary sciences, anthropology is a product of the European tradition. Some argue that it is a product of colonialism, with one small and self-interested part of the species dominating the study of the whole. If we are to understand the species, our science needs substantial input from scholars who represent a variety of the world’s cultures. It was a deliberate purpose of the IXth International Congress of Anthropological and Ethnological Sciences to provide impetus in this direction. The *World Anthropology* volumes, therefore, offer a first glimpse of a human science in which members from all societies have played an active role. Each of the books is designed to be self-contained; each is an attempt to update its particular sector of

scientific knowledge and is written by specialists from all parts of the world. Each volume should be read and reviewed individually as a separate volume on its own given subject. The set as a whole will indicate what changes are in store for anthropology as scholars from the developing countries join in studying the species of which we are all a part.

The IXth Congress was planned from the beginning not only to include as many of the scholars from every part of the world as possible, but also with a view toward the eventual publication of the papers in high-quality volumes. At previous Congresses scholars were invited to bring papers which were then read out loud. They were necessarily limited in length; many were only summarized; there was little time for discussion; and the sparse discussion could only be in one language. The IXth Congress was an experiment aimed at changing this. Papers were written with the intention of exchanging them before the Congress, particularly in extensive pre-Congress sessions; they were not intended to be read aloud at the Congress, that time being devoted to discussions — discussions which were simultaneously and professionally translated into five languages. The method for eliciting the papers was structured to make as representative a sample as was allowable when scholarly creativity — hence self-selection — was critically important. Scholars were asked both to propose papers of their own and to suggest topics for sessions of the Congress which they might edit into volumes. All were then informed of the suggestions and encouraged to re-think their own papers and the topics. The process, therefore, was a continuous one of feedback and exchange and it has continued to be so even after the Congress. The some two thousand papers comprising *World Anthropology* certainly then offer a substantial sample of world anthropology. It has been said that anthropology is at a turning point; if this is so, these volumes will be the historical direction-markers.

As might have been foreseen in the first post-colonial generation, the large majority of the Congress papers (82 percent) are the work of scholars identified with the industrialized world which fathered our traditional discipline and the institution of the Congress itself: Eastern Europe (15 percent); Western Europe (16 percent); North America (47 percent); Japan, South Africa, Australia, and New Zealand (4 percent). Only 18 percent of the papers are from developing areas: Africa (4 percent); Asia-Oceania (9 percent); Latin America (5 percent). Aside from the substantial representation from the U.S.S.R. and the nations of Eastern Europe, a significant difference between this corpus of written material and that of other Congresses is the addition of the large proportion of contributions from Africa, Asia, and Latin America. "Only 18 percent" is two to four times as great a proportion

as that of other Congresses; moreover, 18 percent of 2,000 papers is 360 papers, 10 times the number of "Third World" papers presented at previous Congresses. In fact, these 360 papers are more than the total of *ALL* papers published after the last International Congress of Anthropological and Ethnological Sciences which was held in the United States (Philadelphia, 1956).

The significance of the increase is not simply quantitative. The input of scholars from areas which have until recently been no more than subject matter for anthropology represents both feedback and also long-awaited theoretical contributions from the perspectives of very different cultural, social, and historical traditions. Many who attended the IXth Congress were convinced that anthropology would not be the same in the future. The fact that the next Congress (India, 1978) will be our first in the "Third World" may be symbolic of the change. Meanwhile, sober consideration of the present set of books will show how much, and just where and how, our discipline is being revolutionized.

Other books in this series which will interest readers deal with migration, development, ethnicity, urbanization and other such topics as well as with relevant social and cultural theory and with different geographic areas of the world in which situations similar to those of American Indians are numerous.

*Chicago, Illinois*  
*January 19, 1978*

SOL TAX





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# *Introduction*

SAM STANLEY

This volume is the result of efforts on the part of Indians and anthropologists to gain a better understanding of what is involved in the process of economic development as it affects American Indian communities. The aim of the study was to try to develop an Indian point of view on the concept of "economic development" and on efforts to improve conditions in Indian reservations and communities. The study also proposed to pinpoint factors contributing to or detracting from the success of such efforts.

Former Secretary of the Interior Rogers B. Morton noted in a speech that economic development is "... a slow and arduous task. The investment of capital is only a small part of it. Great magazines, for example, are not just printing presses and pulp forests. They are an organized group of dedicated, skilled people. The same is true for a successful Indian enterprise, but it doesn't come about over night" (Morton 1973).

Economic development does indeed take an organized group of dedicated, skilled people, and Indian tribes have shown themselves to

This study was supported with a grant from the Office of Economic Research of the Economic Development Administration, U.S. Department of Commerce, under grant #99-7-13229.

I should like to thank the authors who wrote the individual reports, and all those who assisted them. They provided me with valuable suggestions and criticisms in preparing the introduction and conclusion, though I alone am responsible for the results. I also wish to thank Ms. Lee Massey for copy editing the original manuscripts. Thanks are due to the Economic Development Administration personnel who offered suggestions and criticisms on the project. In particular Ms. Charlotte Breckenridge, as project liason, was helpful from the beginning to the end. Ms. Jo Ann Moore did the very fine maps and illustrations. Finally, I would like to thank Ms. Valerie Ashenfelter, Ms. Lydia Ratliff, Ms. Priscilla Weatherly, Ms. Judith Wojcik, and Mr. William Douglass for the typing, proofreading, and other important tasks.

be this for thousands of years. Yet, if measured by the criteria for twentieth century economic development, most Indian tribes fall far short of the mark. How is it that a self-reliant, completely competent group of tribal people cannot get above the generally acknowledged poverty level of the United States? And is it true, as Vine Deloria Jr, has asserted, that those tribes which hewed most closely to traditional forms of governing themselves have been much more successful in achieving some modicum of economic development?

These are not new questions but they are implicit in the recent publication of a body of materials by the Joint Committee on Economics of the U.S. Congress (U.S. Congress Joint Economic Committee 1969). The articles compiled in those two volumes, edited by Frazier Kellogg, focused specifically on problems broadly related to Indian economic development, and they attracted the attention of many who were concerned about the government's role with respect to this problem.

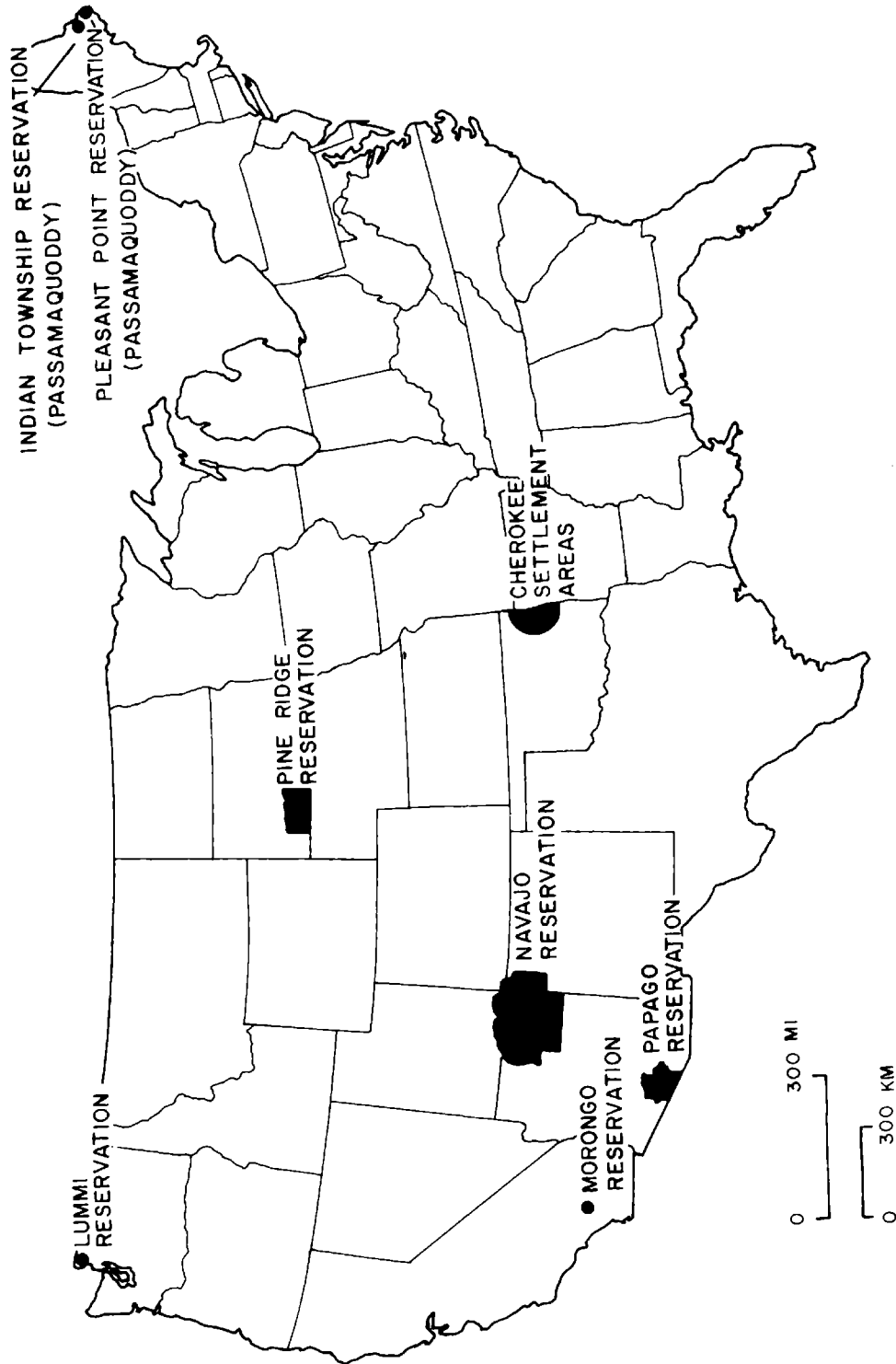
The Economic Development Administration Office of Economic Research saw that the Joint Committee Report raised a series of interesting research problems which could only be solved empirically. They knew an on-the-ground, factual fieldwork approach was required. As a result talks began between representatives of EDA-OER and the editor of this report. Because the funds available were quite modest, it was agreed that only a minimum amount of fieldwork could be accomplished. At the same time everyone expressed a firm desire to involve Indians as fully as possible in all phases of the work. It fell upon the principal investigator/editor to enlist the services of as many Indians as possible in the research. Originally six tribes were selected—Lummi, Morongo, Navajo, Papago, Cherokee, and Pasmamaquoddy. Later, it was possible to add the Pine Ridge Sioux. The selection of the tribes was governed by a number of considerations. First, it was desirable to get a geographic spread. Second, we wanted a spread in terms of population size and land area. Third, we wanted tribes with very different histories of white contact. Fourth, we wanted tribes with various experiences of economic development, including at least one successful group as well as at least one very doubtful case. Finally, we had to choose tribes that had been recently studied by people who would be willing to prepare monographs.

On the whole it would seem that Indians benefited both directly and indirectly from this research. The Lummi work was done by Vine Deloria, a Sioux, with the assistance of some Lummi students at Western Washington State University at Bellingham. Morongo reservation was done by Dr. Lowell Bean and Madeline Ball (a Cahuilla) with assistance from many of the Morongo people. The Navajo work began under the direction of Milton Bluehouse, a Navajo, who unfor-

tunately had to withdraw because of a number of overwhelming commitments. He was succeeded by Dr. Lorraine Ruffing, an economist, who lived for a few months at Shonto, and was able, with the assistance of the Navajo people, to get a good basic grasp of the Navajo economic situation. The Papago study combined the efforts of Dr. Bernard Fontana and two Papagos, Juliann Ramon and Henry Manuel. The Eastern Oklahoma Cherokee research was conducted by Albert Wahrhaftig with the assistance of a number of native Cherokee people. The Passamaquoddy study was carried out by Susan Stevens, wife of former Governor of the Passamaquoddy and presently Commissioner of Indian Affairs for the State of Maine, John Stevens. The Pine Ridge study, carried out by Dr. Ray DeMallie, was commissioned well after the other studies and required somewhat more fieldwork, and a portion of the funds for it went to Indians who assisted him in the field.

After the initial researchers were selected, the group met in Tucson, Arizona, to discuss the strategy of research and the procedures to be followed. Most of those who met there were familiar with other anthropological examinations of Indian economic behavior. In particular, they knew of the volume entitled, *Human problems in technological change*, edited by Edward Spicer and published by Russell Sage Foundation in 1952. Many of the lessons of that volume would be repeated in this study, but everyone realized there would be important differences. The Spicer volume consisted of a whole series of case studies, many of which emphasized the futility of trying to impose outside programs upon Indian tribes. The present study concurs with it on this point, as well as many others. However, the basic approach of this study differs primarily in that it looks at economic behavior within an even wider context. Our strategy and procedure were quite different from that of the Spicer study, with the possible exception of the Papago monograph with its emphasis on a case study approach. To begin with we agreed to try to adhere to a suggested check list of factors that seem to be somewhat closely related to economic development.<sup>1</sup> No one was expected to modify his or her material to conform to the list, but everyone was asked to use it in carrying out their research. The categories of the list seem to come from the "dismal science" — economics — and as such are foreign to most anthropologists and to almost all Indians. This is not to disparage the efforts of economists, but rather to point up the fact that when man is viewed holistically, i.e. anthropologically, it requires some effort to understand the narrower focus of the economist. Similarly, while anthropologists do not "think" like Indians, they tend, at their best, to

<sup>1</sup> Appendix, page 590



Map 1. Location of seven Indian tribes described in this volume

have a world view with many similarities. In other words, when anthropologists are attempting to understand and interpret Indian behavior, their accounts will come close to those which the Indians themselves express, albeit somewhat removed from a pure economic interpretation.

Following the Tucson meeting, each researcher commenced serious work on his/her respective group. Then, from July 5 through July 9, 1972, everyone met again in Seattle, Washington, for three days. At this meeting progress reports were given and all had an opportunity to go to the Lummi reservation and observe the aquaculture project. We are indebted to Lummi tribal officials and Dr. Wally Heath for their gracious hospitality and careful description of the project. Our visit provided us with an unusual view of what can be accomplished when Indians are permitted to go at their own pace on tasks which they wish to accomplish.

Our next meeting took place in San Francisco from February 15 to February 17, 1973. By that time most of the manuscripts had been finished, and our major purpose was to try to test generalizations about American Indian economic development as described in each of the reports. Considerable discussion took place and a kind of consensus emerged. In effect everyone agreed that the key to economic development for American Indians lies in the extent to which they feel involved at the grass-roots level. The kinds of problems which this conclusion produces varies for each of the communities discussed and undoubtedly for every one of the Indian tribes not included in this particular study. The nature of the variation will be apparent to the reader and it is spelled out conceptually later in this introduction. On April 19, 1973, most of those involved in the project participated in the presentation of our tentative results at the Southwestern Anthropological Association Meeting in San Francisco. Dr. Sol Tax served as a discussant at this meeting, and much valuable criticism resulted. Our final review and airing of the project took place in Oshkosh, Wisconsin (August 27-31, 1973) followed by a formal presentation at the IXth International Congress of Anthropological and Ethnological Sciences in Chicago (September 1-8, 1973).

In writing these accounts each of the authors was asked to imagine that his work was being read by Indians, bureaucrats, legislators, and anthropologists, economists, etc. in that order. This is a pretty heavy order, but because there was heavy Indian involvement it was not impossible. Moreover, Indians will have no difficulty in recognizing the processes described by each of the authors. They know that for a long period of time they have been subjected to the power of the federal government with respect to the conduct of their own affairs. The nature of this subjection is well spelled out in the administrative

structures of the Bureau of Indian Affairs (BIA). The BIA in turn simply refers to the Acts of Congress which grant them the authority to do whatever it is that they do. All kinds of legal questions can be raised concerning the relationship of Indians and the federal government, but these are not the subject of our report. This, of course, does not mean that we can or will ignore the nature of the relationship, but we shall try to keep it in proper perspective.

The reader of this volume will doubtless be struck by the seemingly heavy historical input in each of the accounts. There are reasons for this. In the first place Indians have a perspective toward modern life which involves their own past deeply. The treaties, which most non-Indians regard trivially, are a sacred part of their life. They are part and parcel of their identity as Indians and nonfulfillment of the treaty obligations is tantamount to stripping Indians of their special status *vis-à-vis* the rest of the American citizenry. Each treaty has its special history usually more in the breaking than the keeping. Second, modern Indians know that they are the descendants of the original occupants of this land. They had their roots here thousands of years before Europeans arrived. They are acutely aware of the specific ways in which they lost possession of over 98 percent of the land to non-Indians. All of this involves history, and it is living history to Indians — handed down orally in every tribe, a part of their collective bitter experience.

Finally, there is another important reason for all of this history. Economic development generally implies capital accumulation and the ability to increase production of goods and services as well as their distribution. Prior to European presence, Indians were as developed economically as they needed to be (Tax and Stanley 1969). Even after Europeans began to gain control of the continent, Indians experienced an economic florescence based on the fur trade, the horse, metal, and adaptation of some European sociopolitical institutions. Despite their initial successes in continuing their own economic development, they subsequently came less and less to share in the nation's progress economically. It is this historical fact which constitutes the present Indian economic development problem. Any understanding of the Indian's present plight must include a grasp of the processes by which it has come to be as it is.

This report, then, is derived from the anthropological perspective rather than the economic. Above all, this means that every action has a context and makes no real sense outside of it. Specifically, this means that Indians are suspicious of development projects which ignore the existing system of social relationships and ideas about land use. The failure of so many development projects on the Papago reservation and at Pine Ridge are good examples of this dictum. With the



exception of the Lummi aquaculture project, it holds true for every development project discussed in this report.

With this and other points in mind it seems appropriate to briefly review each study so that a cursory reader might get a quick grasp of the thrust of each report.

Beginning in the east, the first point of European contact, we can look at the Passamaquoddy Indians in the state of Maine. The report by Ms. Susan Stevens is remarkable. To begin with, it is the first clear account of how the Passamaquoddy came to be in their present plight. From an historical point of view it is the first history of the Passamaquoddy which corresponds to their own view of themselves. Second, it brings to our attention the present condition of a tribe which has been ignored by the Federal Government since the founding of the American Republic. They are an Eastern United States Indian group which has been swept under the table for almost 200 years. A third significant fact, which incidentally characterizes all of the reports, is the strong emphasis on their persistence as an identifiable American Indian social group. Despite enormous pressures to "disappear," the Passamaquoddy are very much with us today and have every intention of remaining highly visible. Ms. Stevens's account deserves especially close perusal because as indicated above, she writes from the vantage point of being married to the long time Governor of the Passamaquoddy who is presently Commissioner of the Maine Bureau of Indian Affairs.

To understand more clearly what contributes to Passamaquoddy persistence as a people, one must read Stevens's section on values, entitled "The Implementation of Federal Social Programs." It spells out the ways in which cultural differences have contributed to the failure of many development programs. At the same time she shows positively how an understanding of basic Passamaquoddy values could make the difference between success and failure in economic development. Her recommendation is that programs must be shaped to fit the culture before they will succeed. It is clear that most prior efforts have been based on the premise that the culture must be changed to fit the program. Her most devastating example was the tribe's refusal of a \$100,000 OEO program until it could be shaped to fit their own existing institutions.

Ms. Stevens makes the point that whatever contributes to and supports traditional Passamaquoddy values has a positive effect on development. The Dana Point School is an example of this principle. Another important area of development is in leadership. This is a somewhat intangible area, yet her case is explicit and certainly the Passamaquoddy would not have been able to do as well without. She

correctly credits the influx of federal funds for new programs as the catalyst for the new leadership.

In concluding her monograph, Ms. Stevens makes a number of positive suggestions for bringing improvements to the Passamaquoddy economic development scene. They are highly specific and should be read in context. Suffice to say she "covers the waterfront", including building on existing activities as well as suggesting new logical extensions of the potential of the Passamaquoddy land and people.

Dr. DeMallie's monograph on the Pine Ridge Sioux is carefully written. It follows the course of Oglala history from a time when they were the mounted masters of the Plains until the present day. He spends some time discussing the traditional subsistence pattern and the sociopolitical organization. Next he does a very succinct and important analysis of Lakota world view. An understanding of this is crucial if one wishes to communicate meaningfully with Sioux people. After this, he establishes the initial economic independence of the Sioux, which is then followed by an increasing dependence upon the goods of the white trader. Historically he recognizes three distinct economic periods following the establishment of the reservation. From 1869-1915, the reservation is developed. The years 1915-1934 are a period of economic crisis and from 1935 to the present there is a New Order.

The modern period really consists of a synthesis of data that spans the decade from 1962-1972. Two-thirds of DeMallie's work is focused on this period. He presents the basic statistics on land, resources, population, and income. The land base is a little over 50 percent owned, there are few resources, the population is increasing steadily, and income is far below the national average.

Dr. DeMallie next examines the modern economy of Pine Ridge. The picture is one of almost grinding dependency. During 1966-1967, 91 percent of all funds expended or generated directly on Pine Ridge Reservation originated in off-reservation public and private social service agencies. When he examines other sources of income, the picture is depressing. In agriculture there are the familiar problems of fractured landholdings, low quality grazing land, and an absence of viable groups to carry out successful exploitation of the land. Only a White run moccasin factory seems able to function profitably on the reservation. It makes few concessions to Lakota culture, and, while many Sioux work in it, they are unable to fit it to their values.

In summing up his monograph, Dr. DeMallie outlines a number of themes related to economic concerns which he considers within the total historical and cultural context of Pine Ridge reservation. They include dependency, lack of tribal unity, management problems, leadership, overlapping and conflicting planning agencies, lack of continuity, and absence of a profit incentive. He does not attempt to judge

whether these themes are good or bad, but rather he uses the theme concept to show some of the important concepts which add up to the present Pine Ridge situation.

Professor Wahrhaftig's description and analysis of the traditional Oklahoma Cherokee is a most original contribution. He states clearly in his introduction that there is a strong dividing line between the descendants of the traditional Cherokee, numbering about 10,000 in 1907, and the persons who identify as being of Cherokee descent (legal Cherokee) totaling about 40,000 when the roll was compiled. One may seriously question his polemic division of Cherokees into traditionals and nontraditionals, but he points out that this is the view of the traditionalists, and as a good anthropologist he is faithfully following their analysis. The issue is difficult to resolve, but what comes out most clearly is the plight of the traditional Cherokee. Wahrhaftig establishes that they are at the bottom of the heap in terms of modern American values of economic, social, and political status. The insidious part of their plight is that they are the true carriers of the Cherokee tradition on cultural, linguistic, and literate (in Cherokee) grounds. They are locked into a system from which they are unable to escape.

In addition to establishing that there is a viable group of traditional Cherokee who struggle daily to maintain themselves, he is able to detail the mechanisms by which they survive. Not surprisingly to students of Cherokee life, we learn the importance of kinship, neighborhood, and religious organization in supporting life. These institutions go far beyond survival — they give meaning to life and therein lies their power.

But survival imposes harsh conditions on many Cherokee families. It involves long connecting trips to uncertain employment. It means going far from one's own community in order to make money. It also involves working for the very lowest wages paid in this region. Cherokee want and need jobs, but they also need to insure the continued existence of their communities and themselves as a people. The traditional Cherokee have no desire to join Eastern Oklahoma's mainstream as white people.

Yet as Wahrhaftig points out in his long final chapter on "The Cherokee Establishment", it is an assumption of those who control the tribal government that traditional Cherokee are moving in that direction. For the Cherokee Establishment, the Cherokee are a resource in two senses. First, they are a cheap supply of labor. Second, they are the means by which the government and tourist dollars can be attracted to northeastern Oklahoma.

Wahrhaftig is not sanguine about the economic future of the traditional Cherokee. Their communities cannot develop without threatening the present system of exploitation. Any independent move toward

development would doubtless be opposed by the present tribal leadership. Yet clearly, the Cherokee settlements will continue to resist all efforts to “develop” them as long as they emanate from “outsiders.” The total situation has all the ingredients of a Greek tragedy.

The Papago monograph is a joint project of an anthropologist (Fontana) and two Papagos (Juliann Ramon and Henry Manuel). They utilized a case study approach to economic development on the Papago reservation over the past 16 years. The record is a dismal one — 13 cases and 12 failures — measured by any criteria! In making their point the authors review the history of the Papago tribe from Western contact to modern times. They graphically detail the manner in which a large amorphous group of people, occupying a contiguous land mass in southern Arizona and northern Mexico, were first separated by a political boundary and then told (on this side of the line) to organize themselves as a political entity. This has been a common experience for tribal peoples, but few nontribals realize what extraordinary demands and hardships it imposes. One can almost predict the factionalism and bewilderment which follow attempts to organize a people along lines and principles both unknown and reprehensible to them.

The record of the 12 failures is, on the one hand, a testimonial to the tenaciousness of non-Indians in pushing their view of the world, while, on the other hand, it documents the deep resistance which Papagos have to those views. Again, it is not a question of resistance to change—it is resistance to performing acts that are contrary to their own views of correct behavior. They cannot act in un-Papago ways.

There is a pattern which characterizes the way in which economic development makes its appearance on the reservation. A development project is proposed either by or to the Bureau of Indian Affairs. The Bureau may then take an active role in persuading the Tribal Council to act or it may (as in leasing) go to individual allottees and gather the requisite signatures. Eventually the project reaches a point where some Papago begin to question it. Those who press for answers do not receive explanations, but are told to either accept the money or lose it. *Alternatives and clarification of the issues and their implications are not offered.* The usual result is that people take the money without ever understanding or feeling involved with the project. Papago remain in the dark about complex legal and economic matters because no one will undertake to explain them. As long as this is the case, there is very little chance that they will be able to participate meaningfully in the development of their own resources.

The authors of the Papago monograph point out that Papagos have been burnt so often by schemes of outsiders that they inevitably react

negatively to each new proposal. They have come to fear the unexpected changes which follow the introduction of new projects. It would appear that any development on the Papago Reservation must proceed slowly and must be very well understood by the Papago people.

The Navajo article is the only account by an economist—Lorraine Ruffing. Her work grew out of her belief that Indian culture may contain institutions which could perform economic tasks carried out by different institutions in Western society. If free enterprise was anathema to Navajo, then what about a cooperative economic system? To learn more about Navajo economy, Dr. Ruffing went to live for a few months at Shonto. She interviewed numerous Navajo and had an opportunity to observe and note their economic activities. She was also able to compare her work with another study of Shonto done in 1955, by Richard Adams, an anthropologist, who worked at the trading post. The results are instructive.

Dr. Ruffing finds that the basic production unit of the Navajo is the extended local kin group that occupies a particular territory. In this area they graze their sheep and other livestock. The sheep provide wool, cash, hides, and meat for the extended kin group. This has been a successful adaptation since the days of Spanish contact, and it is complemented by agriculture, especially the growing of corn.

Together with the traditional subsistence activities there is federal assistance, under a number of guises, plus some industrial employment and income from leases. To some, the newer sources of income represent the future, yet Ruffing questions the extent to which they maximize Navajo economic development opportunities. Her statistical tables suggest that leasing of mineral rights is not necessarily the most economically advantageous policy for the tribe to follow.

Dr. Ruffing had hoped to test alternative models for economic development on the Navajo reservation. She argues that Navajo culture is antithetical to Western capitalistic entrepreneurship. In this respect she is almost surely correct. Capitalism involves assumptions about the relationship of man to man, man to nature, and man to the processes of production, and these assumptions are foreign to the Navajo.

In searching for an alternative development model, Dr. Ruffing seems to settle for expanding the traditional economic activities of the Navajo. Any other model would seem too abstract. The advantages of her suggestion is that it would use the most abundant resources: land and labor. It would cushion the fluctuations of temporary wage labor by providing an important supplement—stock raising—and it would take advantage of the existing investments and knowledge while involving a majority of the population. Such a development would also involve existing production units with a long tradition of doing the job.

She also suggests that a cooperative livestock marketing program could be established and run by the tribe.

In summarizing her report, Dr. Ruffing emphasizes the continuity of Navajo social institutions over time and their close interconnections with traditional economic activities. Their interdependence is such that changes in one will have serious repercussions in the other. Her conclusion is that the investment in an infrastructure must be accompanied by an intelligent focus upon increasing productive capacity. If these two are not coordinated there will be more grief in the future for the Navajo people.

In his monograph on the southern California Morongo reservation, Dr. Lowell Bean chooses to emphasize those processes which have permitted the Morongo people *to survive as a people* for the past century. Within the context of this overall theme, he is able to analyze the past and present behavior of Morongo people. One of the principal strengths of his report is the deep involvement of Morongo people in the research, and they are responsible for much of the evidence which supports his general theme.

He begins with a description of his methodology and procedure. This is followed by a history of the Morongo people. In approaching the modern day he distinguishes between a Mission period, a Rancho period, and an early American period. He follows this by describing the kinds of associations which carry the "load" of Morongo culture in facing up to the pressures of the dominant society.

Bean then proceeds to describe the basis for ethnic identity at Morongo. This turns out to be a concatenation of history, tribalism, and a sense of being different from outsiders. The key element here is their reluctance to get into economic planning unless it matches their own notions of what is proper for Morongo people to do. The rule tends to be that if members of the tribe can organize to carry out some entrepreneurial activity then this is perfectly all right as long as it does not jeopardize the integrity of the reservation. This, of course, is a powerful rule since it simultaneously encourages all to be entrepreneurs while making clear that their activities can never be at the expense of community integrity. One gets the clear impression that community values reign paramount over any individual's personal aspirations.

To outsiders, Morongo appears fractionated and hopelessly divided. Any casual observation would confirm this picture, but Bean is able to demonstrate that this apparent "anarchy" is precisely what insures the continued existence of the Morongo people. The apparent paralysis of the tribe in making decisions about programs "aimed at their own benefit" is really a mechanism by which they closely examine what they do not thoroughly understand.

The Morongo people are highly suspicious of any economic development schemes. They even turned down a planning development grant. Clearly they are only interested in development projects which they thoroughly understand. The challenge is to come up with some realistic programs which fit the needs of the Morongo people and which will not violate their own sense of being a people.

The Morongo paper has an appendix which responds specifically to the list of questions and categories (pages 214–235) suggested by the EDA research branch. This response addresses itself to each of the variables which economists consider crucial in measuring economic development. Bean does the best job in responding to these economic categories, and his report is the richer for this. At the same time, because he is an anthropologist, he insists on seeing it all in context. The real value of the questions raised by the EDA is that they turn the attention of noneconomists to areas of human behavior not previously considered. The great value of Bean's report turns on three important points: first, an account of Morongo, historical and contemporary, which reflects considerable Morongo input; second, a detailed description of the essentials of Morongo survival as a people; and third, a detailed response to the EDA list which insists on bringing it into the context of a living people.

The Lummi Indians, a small tribe of the northwest coast in western Washington, are described by Vine Deloria, a Standing Rock Sioux from South Dakota. Mr. Deloria became acquainted with the Lummis while on the faculty of Western Washington State University at Bellingham. In compiling his monograph, Deloria worked closely with Lummi tribal officials and enlisted the services of Lummi students enrolled in studies at his university.

Deloria establishes the independence of the Lummi people prior to White encroachment. He details the treaties which led to the establishment of the reservation together with the problem of implementing all of their provisions. In this respect he cites three of the more important treaty rights' cases which the Lummi engaged in after their signing. The cases describe a continual struggle between the Lummi and the State of Washington over the limits of Lummi fishing rights. According to Deloria, the Bureau of Indian Affairs remained silent throughout all these controversies, though they were bound to protect the Indian rights. In spite of harassment by the state, Lummis were able to survive comfortably until about 1890. For the ensuing 74 years, the Lummis found themselves on the defensive. The surrounding white communities clamored to have the reservation open up to white settlement. There was also pressure on the Lummi to become farmers and turn away from the sea. Eventually whites were able to buy Lummi land and a considerable amount has been alienated.

Throughout the period from 1890 to 1964, the Lummi economic situation deteriorated. The fishing industry fell off as the salmon decreased in number each year. It also became prohibitively competitive as sophisticated technology began to dominate the boats and fishing gear. Logging without re-forestation left the Lummi without commercial stands of timber. Migratory labor and seasonal cannery work were major sources of income to the people.

In the early 1960's the Bureau of Indian Affairs started cottage industries on the reservation. The industry groups were called Lummi Knitters, Lummi Weavers, and Lummi Arts and Crafts. None of these programs, conceived by outsiders, was able to provide income for the workers, and each quietly faded away.

The central theme of Deloria's account is the development of aquaculture. He describes how, in 1967, the tribe chose to develop the tidelands of Lummi Bay for the commercial production of seafood, instead of building a magnesium oxide plant. They made this choice, he believes, because it permitted them to continue to be fishermen and because there would be community control of the whole project.

Deloria points out that it is not possible to discuss the development of aquaculture without discussing the development of the community. They have grown together and are closely intertwined. Economic development is community development in this particular case, and it follows a concept which has been internalized by the Indians. Above all, the Lummi understand themselves and what they are doing on this project. They are comfortable and secure in the knowledge that they are continuous with and faithful to their past tribal experience. They are into a fascinating development and they control it. The Lummi aquaculture scheme is a superior model for other Indian tribes to scrutinize.

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# *Navajo Economic Development: A Dual Perspective*

LORRAINE TURNER RUFFING

This study is another attempt to analyze the many diverse aspects of Navajo underdevelopment with the hope of isolating the most important stumbling blocks. It is an exercise undertaken primarily to aid the planners charged with promoting Navajo development.

It contains a brief history of Navajo development, an examination of the obstacles to development, an analysis of federal attempts to promote development, and an evaluation of the present development strategy. Much of the report is written from the perspective of the Navajo tribal government, since it is the entity charged with promoting development and responsible to the Navajo people. Implicitly, the Navajo government is treated as if it perfectly reflected the desires of the Navajo people. This assumption does violence to reality, because there is often a divergence of opinion on methods and rates of development between the Navajo executive branch and the Navajo people. If this report treated the development dilemma at only the tribal level it would contribute little new to the existing state of knowledge. Therefore, the section "Development and the Traditional Community" contains an examination of development at the grass-roots or community level.

## HISTORY OF NAVAJO DEVELOPMENT: FROM A SELF-SUFFICIENT TO A DEPENDENT ECONOMY

The surrender of the Navajos in 1863–1864 marked the beginning of their government wardship. Eight thousand five hundred Navajos and four hundred fifty Mescalero Apaches were confined to 40 square miles of poor land known as "Bosque Redondo." Here government

agents attempted to transform Navajos into peaceful, village-dwelling, Christian farmers. The projects failed for a number of reasons. Drought, hail, and worms attacked the crops; Comanches raided the sheep; Navajos quarreled with Mescaleros; and Congress objected to the cost: \$1,114,981 for the first 20 months of the experiment and \$750,000 annually for rations (Kelly 1968: 7).

In 1868, after four dismal years of captivity, twelve Navajo leaders signed a treaty with General W. T. Sherman. The United States Government agreed to establish a reservation and to erect an agency building, a warehouse, a carpenter/blacksmith shop, a schoolhouse, and a chapel. Each Navajo family head who wished to farm would be allowed to select a 160-acre plot (80 acres for single adults) to be retained as long as he chose to cultivate the acreage. The government issued 15,000 sheep and goats, nearly two animals for every man, woman, and child. In 1872, 10,000 more sheep were issued (Shepardson 1963: 12). In return, the Navajos promised to give up raiding and pillaging as a way of life.

The treaty makers of 1868 assumed that the Navajo would be assimilated into the American mainstream if he were made a property owner, an entrepreneur farmer, and economically independent of the United States government. The allotment of land to family heads or individuals ignored several facts: Navajos believe that individuals do not "own" land, they merely enjoy "use" rights; Navajos did not have the capital or technical knowledge necessary to develop the land; the Navajos belonged to extended families in which economic support was mutual.

From 1863 to 1913 the lot of the Navajos was seemingly profitable and peaceable. Their numbers had increased from 8,000 to 30,000 by 1912. Animals increased from 15,000 sheep to their prequest number. The federal government, recognizing that the original four-million-acre grant was too small to support a pastoral economy, enlarged it by 1911 to 12 million acres. Navajos engaged in a number of activities, principally subsistence agriculture, herding, and weaving. They were economically self-sufficient. However, it was an illusory type of self-sufficiency. The fixing of boundaries insured that it would only be a matter of time before the increasing population would overburden the fragile resources.

Until the 1920's, the Navajos lived in relative isolation. Because they did not occupy prime land, they were bypassed by White settlers. The only pressure for their land came from prospectors who suspected its mineral wealth, which remained unexploited until the 1920's.

The most significant change in Navajo land resulted from erosion caused by overgrazing. In 1930 there were nearly 1,300,000 sheep and goats on the Navajo reservation and approximately 40,000 Navajos,

or 32.4 animals per capita (Young 1961: 150). The estimated carrying capacity of the range was 513,000 sheep units. (One sheep or goat = 1 sheep unit; one burro = 3 sheep units; one cow = 4 sheep units; one horse = 5 sheep units. There is presently no legal penalty for exceeding the "permitted" number of sheep units.) Overgrazing lowered the productivity efficiency of the land by denuding it of a protective cover of vegetation, which increased the rapidity of run-off. The most conspicuous evidence of overgrazing was the increase in the size of gullies that gashed the reservation. In 1897, Orabi Wash was no more than twenty feet across and twelve feet deep; in 1937 it measured 150 to 300 feet wide and 30 to 35 feet deep (Hoover 1937: 289).

A federal livestock-reduction program was instituted, and between 1934 and 1940 reservation stock was reduced by one-half. Stock reduction, combined with population increase, lowered the livestock per capita ratio from 32 to 8; Navajos could no longer depend solely on their own resources for support. As a result of the reduction program, the Navajos suffered a severe economic shock—and psychological shock as well. When it proved impossible or too costly to move animals to packing plants, these indicators of Navajo wealth were shot and left to rot or were set on fire. During a Senate hearing in 1936, a Navajo from Tuba City asked how the Senators would feel if he asked them for a \$5 bill and then burned it in front of them. "That," he said, "was what the Navajos felt when their valuable livestock was destroyed" (Aberle 1966: 61-62).

The Navajos, embittered by the reduction program, became suspicious of all programs to improve their range. Tall John, when confronted by government reduction agents said, "If you take my sheep, you kill me. So kill me now. Let's fight right here and decide this thing" (Downs 1964: 20). The program was a failure politically, economically, and ecologically.

The fault can be laid to federal planners who failed to see that sheep were a way of life for the Navajos. Reduction of sheep meant abandoning old ways and values; it meant a cultural transformation as well as an economic one. Because the federal government did not offer viable economic activities, one could hardly expect the Navajo to scuttle both the traditional economy and their culture.

Although the program did not restore the Navajo range, it did end the self-sufficient nature of the traditional economy. Before the imposition of reservation boundaries, the Navajos could expand their use areas as population and livestock increased. After 1911 it was impossible to maintain a pastoral economy which used the land extensively. The fact that the Navajo population expanded from 8,000 to 40,000 and their livestock from 15,000 to 1,300,000 testifies to the capacity of the land. However, the population would eventually overtax this

capacity. Thus, the Navajo nation with or without stock reduction would have eventually faced the problem of supporting an expanding population on a limited resource base.

There are a number of alternatives open to such an economy. First, excess population can migrate, allowing those who remain to live on the fixed resources. An induced migration, euphemistically referred to as "relocation", was attempted by the Bureau of Indian Affairs (BIA) in the 1950's and was unsuccessful. Second, the Navajos could export products in which they have a comparative advantage and import those they do not produce. This has been occurring since 1921 when Navajos began to lease their mineral wealth. However, the minerals are exported in their crude state and the Navajos receive very little of their final value. Mineral and timber resources should be processed before they are exported in order to capture as much as possible of the "value-added" and to generate additional jobs.

Federal interference was not limited to stock reduction. In 1934 Congress passed the Indian Reorganization Act (IRA) which among other things provided for democratically elected tribal governments. The Navajos, smarting from the recent economic hardships visited upon them by the reduction program, voted down the opportunity to organize under the IRA. The current tribal council functions under special bylaws issued by the Secretary of Interior in 1938 (Goldberg 1976: 3). Even though the Navajo rejected the IRA government, they have not been able to avoid the hiatus between the values of traditional Navajo people and the actions of tribal government officials.

To supplement the decline in stock income which resulted from reduction, the government planned a series of public works projects, but federal budgets were subject to political whims. When funds were decreased, the government was unable to compensate the Navajo people for their investment loss or even maintain their annual income at former levels. The Navajo were forced to seek wage work off the reservation. World War II catapulted 3,600 Navajos into the armed forces and 15,000 Navajo men and women into off-reservation work in war plants and agriculture. The end of World War II precipitated an economic crisis, as the Navajo labor force reluctantly returned to a substandard level of living on the reservation (Shepardson 1963: 16-17).

Under the Navajo-Hopi Long-Range Rehabilitation Act of 1950, the federal government began its first program to promote economic development. The act was intended to assist Navajos in re-creating a self-supporting economy and, ultimately, in attaining standards of living enjoyed by other citizens. The act financed school construction, soil conservation, and relocation. Of the appropriated \$89,946,240, 78 percent was allocated to roads, education, health, housing, and com-

Table 1. Allocation of development funds (1950-1961)

| Activity                         | Dollar amount | Percent of total funds |
|----------------------------------|---------------|------------------------|
| Roads                            | \$38,237,680  | 0.425                  |
| School construction              | 24,997,295    | 0.277                  |
| Health                           | 4,750,000     | 0.052                  |
| Service facilities               | 495,100       | 0.005                  |
| Housing                          | 26,300        | 0.0002                 |
| Water                            | 1,356,670     | 0.015                  |
| Irrigation                       | 6,616,775     | 0.073                  |
| Conservation                     | 7,097,175     | 0.078                  |
| Colorado Irrigation Project      | 3,449,750     | 0.038                  |
| Survey of timber, coal, minerals | 436,895       | 0.004                  |
| Placement and relocation         | 194,600       | 0.002                  |
| Revolving loan                   | 1,800,000     | 0.020                  |
| Business development             | 238,000       | 0.002                  |
| Telephone and communications     | 250,000       | 0.002                  |
| Total                            | \$89,946,240  |                        |

munications; 20 percent was invested in improving the productivity of subsistence agriculture and sheep raising; and a mere 2 percent was appropriated for starting new enterprises (see Table 1). Although investment in infrastructure was necessary for development, it was not sufficient. Roads and an educated, healthy labor force do not in themselves generate productive enterprises. Simultaneously with the Rehabilitation Act, income acquired from the exploitation of mineral leases increased. By 1975 tribal mineral revenues from oil, gas, coal, and uranium amounted to \$305,914,831 (see Table 2). Of this large total, \$34,418,112 (11 percent) was invested in job generating enterprises (Navajo Tribe 1975, Financial Statement). The remainder was used for tribal administration, services, maintenance of productive resources or was invested in securities.

Table 2. Tribal mineral production and revenues (1922-1975)

| Mineral | Amount produced     | Revenue received |
|---------|---------------------|------------------|
| Oil     | 333,259,441 barrels | \$272,716,931    |
| Gas     | Not available       | 7,836,661        |
| Coal    | Not available       | 10,490,233*      |
| Uranium | Not available       | 14,871,006*      |
| Total   |                     | \$305,914,831    |

Source: *Annual report of mineral leasing activities, June 30, 1975*. (U.S. Department of Interior 1975).

\* This figure includes income only from 1967-1975.

The Rehabilitation Act was followed by a host of antipoverty programs. It would be interesting to compute what each federal agency spent on the Navajo reservation from the initiation of the War on Poverty. However, there is no on-going information system which automatically collects, compiles, and analyzes information on programs operated for the benefit of the tribe by federal, state, and private agencies, though such an analysis was undertaken for one year (Fiscal Year 1972) by the accounting firm of Ernst and Ernst (Table 3). In

Table 3. Federal programs (FY 1972)

| Agency  | Amount        |
|---|---------------|
| U.S. Department of Agriculture                | \$ 375,000    |
| U.S. Department of Commerce                   | 3,711,000     |
| U.S. Department of Health, Education, Welfare | 47,858,000    |
| U.S. Department of Housing & Urban Develop.   | 25,000,000    |
| U.S. Department of Justice                    | 50,000        |
| U.S. Department of Labor                      | 6,853,000     |
| U.S. Department of Interior                   | 170,478,000   |
| U.S. Office of Economic Opportunity           | 10,042,000    |
| Total United States government                | \$264,367,000 |

Source: Ernst and Ernst 1973.

addition to direct federal funding, the Navajo economy benefited from indirect federal assistance (\$73 million), state agency contributions (\$9.7 million), Four Corners Regional Commission contributions (\$4.8 million), private, religious, charitable contributions (\$7.4 million) and Navajo tribal funds (\$45.9 million). These contributions to the Navajo economy totaled \$406.9 million in FY 1972 or \$3,124 per Navajo. When one learns that Navajo income per capita from all sources, including welfare was \$900 and compares this figure with health and education statistics, one wonders who benefited from such public expenditures. Ernst and Ernst analyzed how \$331 million of the \$406.9 million was spent (Table 4). As can be seen from Table 4, 59.9 percent of all public sector funds were spent on health, education, housing, and welfare. Little was available for job creation.

The results of this pattern of spending have been described by David Aberle:

At the end of 100 years of administration we find an undereducated, unhealthy, overcrowded population with a primitive livestock and farming pattern, with [an inadequate] technological substratum for development, and with almost no development save for exploitation of mineral resources by outside private capital (Aberle 1969: 243).

Such underdevelopment is confirmed by the socioeconomic statistics on income, employment, education, health, housing, and transportation.

Table 4. Federal, state, tribal, and private spending (FY 1972)

| Category  | Amount        | Percent of total |
|---|---------------|------------------|
| Health and medical care                             | \$ 34,034,000 | 10.28            |
| Education   | 97,720,000    | 29.51            |
| Public assistance                                   | 41,491,000    | 12.53            |
| Construction  | 36,015,000    | 10.87            |
| Agriculture and land management                     | 3,521,000     | 1.06             |
| Economic development*                               | 12,909,000    | 3.90             |
| Housing   | 25,178,000    | 7.60             |
| Administration, planning, miscellaneous, assistance | 57,833,000    | 17.46            |
| Earned tribal income                                | 22,488,000    | 6.79             |
| Total   | \$331,189,000 | 100.00           |

Source: Ernst and Ernst 1973.

\* Economic development included SBA loans, EDA loans and grants, OEO loans and grants, and BIA industrial development funds.

### *Income and Employment*

When income (cash and kind) from subsistence activities, wage work, and welfare are taken into account, average Navajo income per capita in 1970 was a mere \$900, compared to \$3,921 for the U.S. The 1971 average per capita income for the Navajo living in an isolated community was even lower, \$725, compared to the national poverty level of \$1,727 for unrelated rural individuals. Sources of Navajo community income are contained in Table 5.

Table 5. Source of Navajo community income, 1971

| Source                | Percent |
|-----------------------|---------|
| Livestock             | 10.1    |
| Agriculture           | 1.1     |
| Weaving and singing   | 2.3     |
| Local wage work       | 44.4    |
| Nonlocal wage work    | 15.1    |
| Welfare (cash & kind) | 26.6    |

Sources: Ruffing 1973: 162.

A Navajo living in an isolated community derives 71 percent of his income from welfare and public sector employments. Low income can be partially explained by unemployment, low educational levels, and poor health. The rate of unemployment and underemployment was a staggering 54 percent in 1971 (see Appendix I, Note A).

### *Education*

The average educational level in 1970 for all Navajos was five years, as compared to the national average of twelve years.

More important, a large segment of the Navajo population has not attained functional literacy in English; 17 percent of the adults over 25 years were not literate, and 12 percent did not speak English. The preferred language of communication for adults is Navajo. If any English is known, it is used with reluctance.

Although the educational level is abnormally low for Navajo adults, the situation is changing for Navajo children. At Shonto individuals between 16 and 25 years of age showed an astonishing average of 10.25 years completed schooling. In 1971 all but 9 percent of the 56,797 children between 5 and 18 years of age were in school—40 percent being educated by the BIA, 46 percent by public schools, and 5 percent by private schools. Of the 32,982 Navajos 25 years and older by 1970, 4,576 had completed high school (14 percent) and 325 had completed college (1 percent) (U.S. Bureau of Census 1970: 146). A recent demographic survey verified these small gains when it found that female household heads (average age, 42.6 years) had 8.6 years of schooling, while male household heads (average age 45.1 years) had 8.5 years (Wistisen 1975, vol. 1, p. 28).

The BIA spent approximately \$2,505 per Navajo child in 1971. For all children, including Indians, the state and local authorities of Arizona spent \$637 per child, New Mexico spent \$547 per child, Utah spent \$560 per child, and the United States average was \$761 per child. BIA expenses are greater because 49 of the 60 BIA schools are boarding schools. Approximately 19,600 Navajo children (35 percent) must leave home to attend BIA and public schools, and private schools have been severely criticized for lack of community control and lack of acceptance of bilingual education. These failings, no doubt, contribute to the slow progress made in Indian education, but we cannot examine them in depth here.

Tribal and BIA scholarships, combined with the efforts of the Navajo Community College and of private individuals or groups, annually send between 1,000 and 1,500 Navajo students to colleges and universities. Little is known about how Navajo students fare, what they study, or where they go after college. It appears that few return to the reservation, because most teachers are non-Navajo (93 percent), even though educating Navajo teachers has been a BIA priority since the late 1930's (U.S. Commission on Civil Rights 1975: 72). The tribal scholarship fund has been depleted from \$10,121,724 in 1967 to \$8,600,235 in 1971, because expenditures have exceeded revenues from the fund. In 1971 tribal scholarship grants amounted to \$526,157, while scholarship revenues totaled \$378,302. To ease the strain on the educational fund and to benefit from its investment in education, the tribe could consider requiring repayment either in cash or in service to the reservation school system. The brain drain will have



to cease if the Navajo nation is going to acquire the management skills necessary for development.

### Health

The Navajo people are served by 6 hospitals and 24 health clinics. In 1971 there were 230 Navajos for every hospital bed and one doctor for every 1,195 Navajos, compared to one doctor for every 613 United States citizens. The Indian Health Service spent \$30,941,000 during 1972 for health care on the reservation, or approximately \$237 per Navajo. Even though the average United States citizen spent only \$177 for health care in 1968, he was considerably healthier (Table 6). The fact that the average United States citizen spends less on health care and is healthier results from the fact that he has better health-care facilities and living conditions. Ninety percent of Navajo families lived in houses without indoor plumbing, which accounted for the high rates of gastritis and enteritis. Most Navajo families slept on earthen floors, which contributed to the high incidence of tuberculosis.

Table 6. Comparative health statistics

|                                       | Navajo <sup>a</sup> |                              | United States <sup>b</sup> |           |
|---------------------------------------|---------------------|------------------------------|----------------------------|-----------|
|                                       | Incidence           | Mortality                    | Incidence                  | Mortality |
| Tuberculosis<br>(per 100,000)         | 176.7               | 15.7                         | —                          | 2.6       |
| Gastritis, enteritis<br>(per 100,000) | 11,914.2            | 18.9                         | —                          | 1.4       |
| Infant mortality<br>(per 1,000)       | —                   | 35.5                         | —                          | 20.7      |
|                                       |                     |                              |                            |           |
|                                       |                     | American Indian <sup>c</sup> | United States              |           |
| Average age at death<br>in 1964       | 43.8                |                              | 63.6                       |           |
| Life expectancy                       | 64.0                |                              | 70.5                       |           |

Source: <sup>a</sup> Navajo figures: Indian Health Service files, <sup>b</sup> United States figures, U.S. Bureau of Census, *Statistical Abstract of U.S.*, 1971, <sup>c</sup> American Indian and United States figures: U.S. Department of Health, Education and Welfare 1966: 16-17.

### Housing

In a 1971 Chinle Agency study, it was found that 90 percent of Navajo families lived in substandard housing. The Navajo Housing Authority was formed in 1963 to implement federal housing programs. Since then 4,000 new homes have been built. However, in examining the FY 1975 housing inventory, only 4,753 houses or 20 percent of the total

Table 7. Navajo housing inventory FY 1975

|                            |        |
|----------------------------|--------|
| Total number of houses     | 23,315 |
| standard condition         | 4,753  |
| substandard                | 18,562 |
| needing renovation         | 8,325  |
| needing replacement        | 10,237 |
| families needing housing   | 2,662  |
| houses needing replacement | 10,237 |
| Total housing deficit      | 12,899 |

Source: *Housing inventory FY 1975* (U.S. Department of Interior 1975).

housing stock were rated in standard condition. Thus, 80 percent of Navajo homes are still substandard. The total housing deficit is almost 13,000 units (see Table 7).

There have been numerous studies and congressional investigations of Indian housing. There are not only problems with the actual delivery of housing to Indian people, but there is also a more serious problem with the type of housing delivered. Federal housing is based on standard designs which have not been successfully adapted to differences in income levels, climate, cultural life-styles, or settlement patterns. As a result, low income Indian families have not been able to properly maintain their suburban ranch style homes or even heat them properly. Federal units built in 1963 already are substandard because of rapid deterioration. The Navajo hogan, while lacking electricity and plumbing, is notably cooler in summer without air-conditioning and warmer in winter without the use of expensive fuels. Federal designs do not accommodate extended families, thus old people must go to nursing homes. While there is little individual land ownership on the reservation, families usually have claim to traditional use areas where they graze their livestock. Their summer and winter hogans are located within this use area. With federal cluster housing, it is no longer possible to live within one's use area. Thus, federal housing will have an impact on Navajo culture, particularly on family structure, on land-use practices, and ultimately on traditional economic activities such as sheep herding and weaving. Such changes will increase Navajo economic dependency, since there will be a greater need for welfare aid to pay utilities and repairs. There will be less opportunity to engage in traditional economic activities, because place of residence is removed from the use area. Nevertheless, the Navajo people are very receptive to federal housing because it has improved health conditions.

In 1976, the Navajo housing effort began to flounder badly due to financial mismanagement. The Navajo Housing Authority invested \$13

million in federal funds in the American Funding Corporation, which was unable to produce the money needed by the authority to defray construction costs. This has stalled the completion of 480 units.

### *Transportation*

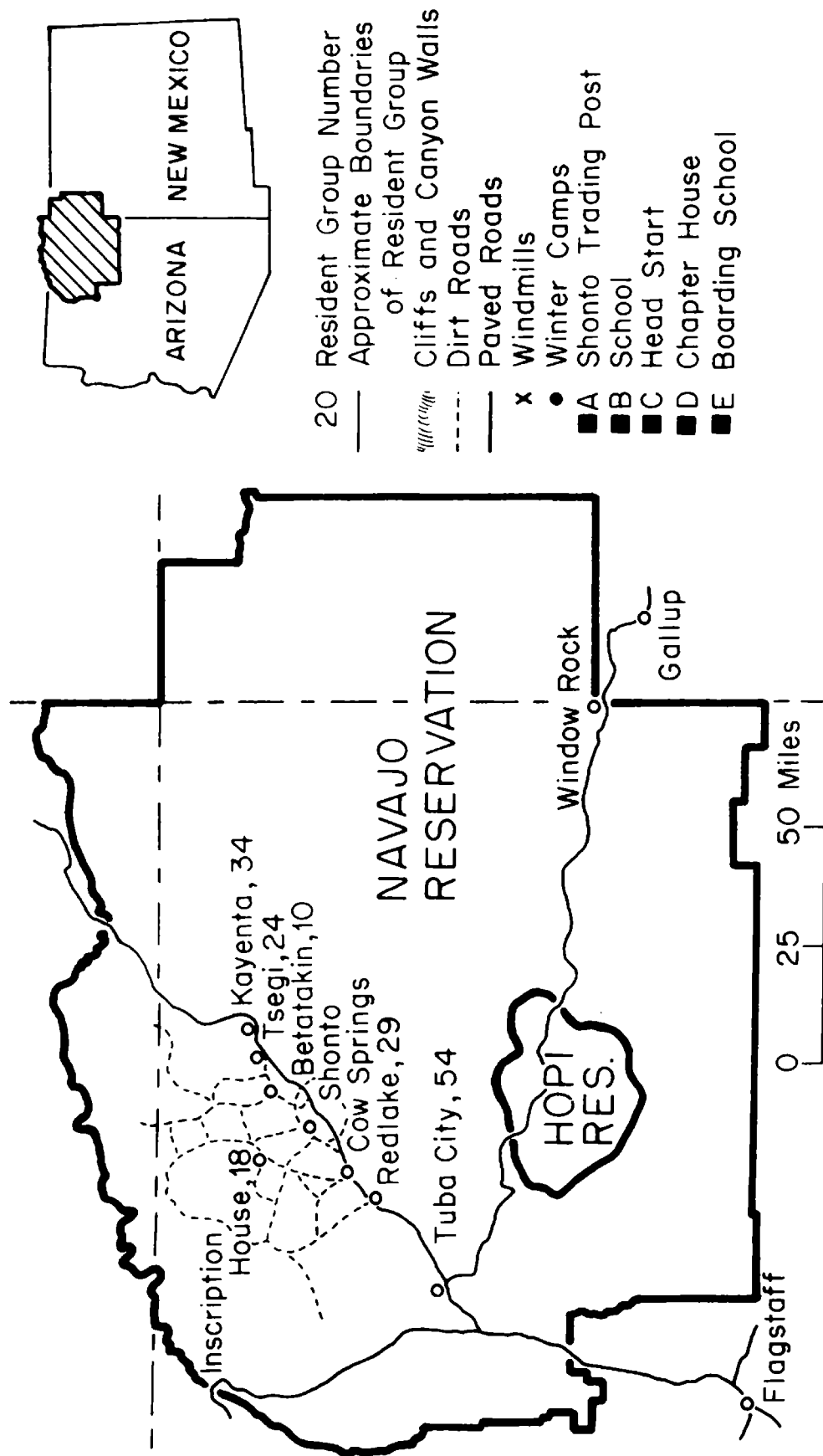
Throughout the Southwest, there are generally 154 miles of surfaced road for every 1,000 square miles of area. On the Navajo reservation, there are only 60 miles of surfaced roads for every 1,000 square miles. Two east/west and north/south highways cross the reservation, but only 1,500 miles of road are paved. Although state highway programs are supplemented by federal funds, and Navajos pay state gasoline taxes, the states do little to build reservation roads, which have primarily been built by the federal government (Aberle 1969: 237). The isolation of the reservation is extreme. If Navajos living in Shonto wish to shop at a nontrader grocery store, they must travel 54 miles to Tuba City; shopping at a major shopping center requires a trip to Flagstaff, 132 miles away.

Lack of adequate transportation facilities adds to the major Navajo problems: boarding school education, independent medical care, high prices, and the lack of industrial and commercial development. To bring the present road system up to surrounding state standards will require an estimated \$600 million. (MacDonald 1972: 21).

## RESOURCES FOR DEVELOPMENT

While one is perplexed by the coexistence of high public spending and low socioeconomic indicators, Navajo underdevelopment is even more puzzling when one considers the fact that Navajos are wealthy in natural resources.

**LAND.** The Navajo reservation occupies a tract of land about the size of West Virginia (See Map 1). Its 14,124,069 acres include contiguous areas in Arizona, New Mexico, and Utah and noncontiguous areas such as Alamo, Canocito, and Ramah. (Hopi reservation is omitted from the total.) The Navajo reservation, one of the most scenic areas in the world, has three distinct climates: the cold, humid climate of the mountain heights; the steppe climate of the mesas and the high plains; the comparatively warm climate of the desert. The topography varies from the 11,000-foot Chuska Mountains, which traverse the reservation from north to south along the Arizona-New Mexico border, to desert lands at 4,500 feet. Annual rainfall averages from 27 inches, reached only at the highest elevations, to 7 inches (Aberle 1969: 229).



Map. 1. Navajo Reservation with Shonto and surrounding area indicated.

The soils may be divided into five classes, based on the criteria of available livestock forage, soil permeability, water retention, slope, erosion, alkali content, drainage, and vegetation. According to these characteristics reservation soils fall into the following categories: 11 percent, excellent; 22 percent, good but more susceptible to erosion; 29 percent, fair; 23 percent, poor; 15 percent, unproductive.

The soils of the humid area are highly productive and are suitable for dry farm agriculture. Such crops as grains, alfalfa, sweet clover, hay, corn, potatoes, turnips, carrots, and cabbage grow readily. The steppe climate is of medium productivity, but, because of the greater acreage involved, this area exceeds the remainder of the reservation in total yield from dry farming and irrigated crops. The rest of the reservation is unsuitable for the growing of crops (Shepardson 1963: 18-19). The BIA land-use inventory for 1971 classified reservation land according to usage (Table 8).

Table 8. Reservation land

| Use                 | Number<br>of acres | Percent of<br>total acres |
|---------------------|--------------------|---------------------------|
| Dry farming         | 9,039              | 0.0006                    |
| Grazing             | 9,069,077          | 0.6480                    |
| Irrigated farming   | 36,830             | 0.0026                    |
| Timber              | 3,502,533          | 0.2500                    |
| (commercial timber) | (439,402)          | (0.0314)                  |
| Unproductive        | 1,359,063          | 0.0970                    |

WATER. This is a land of little rain; large areas are unproductive, others are capable only of low productivity. In assessing land values, access to water is more important than amount of acreage. Usable water can be found on only about 39 percent of the reservation, 32 percent of the area has brackish water, and 29 percent has almost no water potential. About 45,000 acres can be cultivated, and, if the maximum expansion possible under the Navajo Irrigation Project is attained, an estimated 156,500 acres could be farmed. The tribe has historic water rights to the Colorado River (50,000 acre feet) and the San Juan River (508,000 acre feet).

However, it signed over 68 percent of its rights to the Colorado to the Navajo Generating Station in the hope of creating employment for local Navajos. It has been unable to secure its full entitlement to the San Juan because that river is already overcommitted to the surrounding non-Indian community.

The Navajo tribe has not developed any overall water plan, although it has been estimated that the use of water in rural areas on the reservation, which was 6,000 acre feet in 1966, will increase to 30,000

acre feet or more by the end of this century. The Navajo population has been outpacing the development of reservation water resources. During the past twenty years the reservation has suffered repeatedly from droughts, and indiscriminate use of water by non-Navajo enterprises makes the situation even more difficult. For example, Peabody Coal chose a slurry operation to transport coal to Nevada in preference to other means. Clearly, it is the least costly method for Peabody, but the cost to the tribe has not yet been estimated. To supply water for the operation at least four wells 2,500 feet in depth were dug, each of which will have pumping capacity of 2,000 gallons per minute. There is a possibility that the water table will be permanently lowered, eliminating the Navajo livelihoods of livestock raising and occasional farming in that area.

**LIVESTOCK.** Sheep raising has been an integral part of Navajo culture since the sixteenth century. Prior to the livestock-reduction program, sheep yielded a sizeable portion of Navajo income, but today yield only 10 percent. Nevertheless, the unemployed labor force spends the bulk of its time in stock-raising activities.

The total carrying capacity of the range in 1974 was 1,587,763 animal units. Actually, the reservation supported nearly 2,512,007 animal units: 526,864 sheep and goats, 49,201 cattle, and 29,353 horses (Figures from U.S. Department of Interior 1974 *Annual range management report*). The reservation was 63 percent overgrazed, with some areas more seriously depleted than others. The situation could be eased by a more equal distribution of animals over the range, but the unequal distribution of water makes this impossible. The failure to develop adequate resources for watering stock limits the number of animals that Navajos can graze.

**TIMBER.** As early as 1888, a sawmill was built to exploit the reservation's timber resources, which now include some 430,302 acres of commercial forest. The Navajo Forest Products Industry annually harvests stumpage valued at \$1–3 million. The resulting lumber sales earn \$7–11 million. NFPI employs 564 Navajos (1975) and in 1976 installed a particle board plant which employs 80 additional Navajos.

**OIL, GAS, COAL, AND URANIUM.** The reservation is rich in subsurface minerals, with vast reserves amounting to 100 million barrels of oil, 23 billion cubic feet of natural gas, 5 billion tons of easily accessible coal, and 80 million pounds of uranium (Table 9). Other materials that could be exploited are helium, copper, bleaching clay, puzzolan, and "frac" sand.

Table 9. Known physical resources (1975)

| Resource          | Amount                    |
|-------------------|---------------------------|
| Sheep and goats   | 526,864                   |
| Cattle            | 49,201                    |
| Commercial timber | 1,524,537 M ft. BM        |
| Oil               | 100,000,000 barrels       |
| Gas               | 23,000,000,000 cubic feet |
| Coal              | 5,000,000,000 tons        |
| Uranium           | 80,000,000 pounds         |

Source: Livestock: *Annual range management report* (U.S. Department of Interior 1974); Timber: *Forestry report* (U.S. Department of Interior 1975); Oil, gas, coal, uranium: *Business Week* (May 3, 1976).

**HUMAN RESOURCES.** There is a sharp contrast between the wealth of Navajo mineral resources and the dire poverty of human resources. In 1975 there were 147,210 Navajos. Annual population growth exceeds 2.5 percent compared with 1.1 percent for the total United States population, and the tribe will have doubled in 28 years (1999). A slowing of this rate is not expected; on the contrary, with 59 percent of the population below 24 years of age, growth will probably accelerate. Median Navajo age is 17, compared with 29 for the United States (MacDonald 1972: 10); average family size is 6.5 compared to 3.6. Unless the external economy improves and racial discrimination diminishes, 80 to 90 percent of the reservation population will wish to remain on the reservation. Planning must be based on a maximum estimate of population and population growth (Aberle 1969: 252).

**LABOR FORCE.** More than 1,000 Navajos enter the labor force each year, and job development must stay ahead of this increase. The 1975 Navajo labor force was estimated to be 41,075, with 50 percent permanently employed, 32 percent temporarily employed, and 18 percent completely unemployed. Thus, 50 percent of the labor force was either unemployed or underemployed (see Appendix, Note B).

The permanently employed are active in the modern sector of the economy while the unemployed and underemployed participate in the traditional sector.

A 1974 labor survey reviewed the sources of modern sector employment (Table 10). Of the existing 20,140 permanent jobs, 14,280 jobs were held by Navajos. As can be seen, the Navajos have had great difficulty in obtaining employment in the construction industry. Sixty-six percent of all permanently employed Navajos were in the public sector. Even if Navajos were to take over the 5,860 positions held by non-Navajos, unemployment and underemployment would remain

Table 10. Source of employment

| Industry                                       | Total number | Navajos | Percent |
|--|--------------|---------|---------|
| Mining   | 794          | 518     | 65.2    |
| Agriculture and forestry                       | 890          | 840     | 94.3    |
| Tourism  | 240          | 217     | 90.4    |
| Manufacturing and processing                   | 1,383*       | 1,281   | 92.6    |
| Commercial trades and services                 | 1,156        | 892     | 77.1    |
| Transportation communication,<br>and utilities | 348          | 333     | 95.6    |
| Construction                                   | 2,716        | 741     | 27.3    |
| Public services                                | 12,613       | 9,458   | 74.9    |
| Total  | 20,140       | 14,280  | 70.9    |

Source: 'Overall Economic Development Program (OEDP) (Navajo Tribe 1974: 23).

\* This total includes Fairchild Semi-Conductor which accounted for 950 employees. The plant closed down in 1974.

high. In 1975 a total of 20,576 Navajos needed full-time jobs; only subsistence activities, the Navajo system of extended family sharing, welfare, and government education and health care have made this amount of unemployment tolerable.

## OBSTACLES TO DEVELOPMENT

Economic development can be analyzed from many perspectives. Examining public expenditures and taking an inventory of natural resources does little to explain the dismal socioeconomic statistics of the Navajo nation. Furthermore, it is not the purpose of this report to imply that public funds are being misspent. The expenditures for health, education, and welfare are necessary and are required by treaty. However, these expenditures merely maintain the people. Their living standard will not improve appreciably unless they are able to obtain jobs. Such jobs can be generated by the development of Navajo resources. However, there are numerous obstacles which prevent the beneficial development of these resources.

**LACK OF CONTROL.** The first obstacle to Navajo development is the fact that Navajos do not control their own resources. The Commissioner of Indian Affairs, acting for the Secretary of Interior, manages all Indian affairs, even though the United States Constitution only empowers the federal government to "regulate Commerce . . . with Indian tribes".

The commissioner in effect has been transformed from a trade commissioner to a colonial governor. In commenting on how federal-Indian relations could be improved, the general counsel for the Navajo tribe, George Vlassis, suggested that "Section 2 of U.S. Code



Title 25 (pertaining to the Commissioner's duties) should be eradicated from the books tomorrow" (American Indian Policy Review Commission, Task Force #9 correspondence from George Vlassis March 24, 1976). Not only does the BIA control Navajo resources, but they control the actions of the Navajo government. Virtually every act of the tribal council must receive the approval of the BIA before it can become law or be acted upon by the tribe.

In a hearing for the U.S. Commission on Civil Rights, the Navajo chairman, Peter MacDonald testified that many of the tribe's plans and proposals for development "have sat in the hands of the bureaucrats for 2 to 3 years — a frustrating and backbreaking situation" (U.S. Commission on Civil Rights: 1975: 89).

Having ultimate control, the BIA has consistently favored one method of exploitation of Indian resources, and that is, to lease them to non-Indians. The BIA had chosen this option because they felt that Indians lacked the skill and capital to properly develop their resources. In the case of the Navajo, the BIA formed the first tribal council in order to sign oil leases. Mineral leasing under the technical guidance of the BIA has resulted in suboptimal rates of return for these resources.

The royalty rates negotiated by the BIA were fixed in dollars per unit of the mineral produced rather than being made a percentage of the value of production. In four out of five coal leases negotiated between 1957 and 1968, the royalty was fixed between \$0.15–0.375 a ton. Since then the value per ton has more than doubled. There is no way to adjust these inequitable royalties because the leases are for ten years or "as long thereafter as minerals are produced in paying quantities". The royalty is thus fixed for the life of the deposit or until the mining company develops a social conscience. To make low royalties even worse the BIA does not verify the companies' production records or insure that the royalty is paid on time. One year (1974) the auditor general of the Navajo nation investigated the United States Geological Service in Roswell and found that various companies were in arrears. In addition to these defects, the leases contain provisions for environmental protection and preferences for Indian hiring which are wholly inadequate. These provisions have been so vaguely worded that the lessee cannot be successfully prosecuted in court for noncompliance.

In a conference on Indian Land Development, Peter MacDonald told the audience that mineral contracts would have to be renegotiated to meet five minimum demands: (1) a fair return, a royalty based on market value; (2) an option for the tribe to participate in the venture as a partner; (3) Indian employment throughout the company, not just in unskilled positions; (4) use of the best technology to protect the environment; and (5) compliance with tribal laws and courts.

However, to date the Navajos have been able to renegotiate only the El Paso Natural Gas coal lease and obtain slightly more favorable terms. They have also set up the Office of Navajo Labor Relations to enforce preferential hiring provisions. The Navajos might realize a greater return for their minerals by direct exploitation or by forming joint ventures with mining companies. Thus far, it has been difficult if not impossible to form joint ventures due to the reluctance of both the mining companies and the BIA.

In the U.S. Commission hearing Carl Todacheene, chairman of the tribal council resources committee, recalled that in the mid-1950's the tribe approached the Delhi-Taylor Corporation with a 50-50 partnership proposal for the development of oil and gas resources. He blamed the proposal's eventual defeat on intensive lobbying at the Department of Interior by industry competitors (U.S. Commission on Civil Rights 1975: 29). Mineral producers themselves have made it difficult for the Navajo to become partners by demanding that the tribe contribute an equal share of equity and working capital, a difficult requirement in view of the scarcity of capital. The lack of capital could be remedied by permitting the tribe to mortgage its royalties in exchange for equity. This supposes of course that royalties are fairly calculated. However, is it fair that the mining company receive  $83\frac{1}{3}$  percent of the market value just for delivering it to the market, with royalties accounting for only  $16\frac{2}{3}$  percent? Royalties should more accurately reflect the value of the resource which can be calculated as that portion of total sales revenue which remains after the company has deducted all the cost of delivering it to the market: wages, depreciation on equipment, material costs, interest on capital. At present royalties are almost always less than this remainder, most of which accrues to the company as excess profit. If the value of the resource were always computed in this manner, then both the company and the Indian owner would know what value could be attached to the Indian equity share.

Even when the tribe has been able to work out a joint venture agreement, it has not been able to secure prompt BIA approval. For example, in January 1973 the Navajo nation sent out 25 invitations for bids for uranium exploration. By January 1974, they had determined that Exxon had made the best offer, and entered into a joint venture agreement. After a deposit is found, the Navajos can choose whether they want to receive a negotiated royalty or up to a 49 percent working interest with Navajos contributing up to 49 percent of the remaining future capital requirements and receiving 49 percent of the future profits. The Navajo nation requested BIA approval of the agreement. On April 2, 1974 the Commissioner of Indian Affairs requested the Navajo area director to undertake an environmental

impact statement. This was not initiated until January 1976. The Navajo Minerals Department felt that the BIA Area Office delayed because they had been left out of the original negotiations. Since the Area Office does not have a mining engineer or a geologist and has a record of approving inequitable leases, what could it have contributed? By March 10, 1975, an assistant interior secretary for energy and minerals made the following assessment of the Exxon agreement:

The enclosed analyses indicate there is no reason for the Secretary (of Interior) to disapprove the proposed contract because it contains financial terms which are inequitable to the Navajo nation. On the contrary the financial terms are attractive. Given the lapse of time that has already taken place (14 months), I recommend that the Department of Interior expeditiously complete the Environmental Impact Statement.

The lease was approved in late January 1977. The three year delay cost the Navajos \$1,500 a day in unpaid interest on the \$6 million bid price to be paid by Exxon but held in escrow until the lease was approved.

Navajo mineral revenues are reduced not only by poorly negotiated leases but by some types of state taxation of non-Indian mineral producers. A tax on mineral production falls in the long run upon the owner of the resource rather than on the developer because the developer will pass on the tax in the form of lower royalties. Since state taxes increase the cost of mineral production to the developers, Navajos will encounter increasing reluctance on the part of the developers to renegotiate old leases with low royalties or negotiate new leases with higher royalty rates. Therefore, a state tax upon mineral developers can be regarded as a tax upon Indians no matter who, in fact, pays the tax. Peter MacDonald has called this the "legal theft" of Navajo resources. Presently, Navajos are writing a tax code, but it remains to be seen if they can displace state taxes. Mineral developers place little credence in the tribal power to tax which originates from its sovereignty and prefer instead to continue to pay state taxes.

The magnitude of lost revenue or the burden imposed on the Navajo by state taxation is staggering. The states of Arizona and New Mexico will collect more in taxes after 1976 from energy producing companies on the Navajo reservation than the Navajo nation will receive from the sum total of coal royalties, rentals, bonuses, and wages. After 1976 approximately 500 Navajos will be employed in coal mining enterprises, energy producing plants, and energy-related pipelines and railroads and will earn \$5.5 million in wages. The tribe will receive \$4.5 million in rents and royalties, \$402,000 in rights of way and water charges. Total energy revenues will be approximately \$10.5 million. In 1974 Peabody Coal Company paid \$1.6 million in Arizona sales and property taxes. Black Mesa Pipeline paid \$1.5 million in property taxes. The Navajo Generating Station will pay \$10.5 million after 1976

(Robbins 1975: 12). The state of New Mexico expects to collect \$12.6 million per annum in sales taxes alone from coal gasification on Navajo lands (Aberle 1976: 18). State taxes will exceed Navajo revenues 2.5 times. Thus, while the Navajo nation is rich in resources, the benefits from these resources accrue to mineral developers and the states.

### *Lack of Capital*

One reason that the Navajo nation has not been able to mine and process its mineral wealth itself or even enter joint ventures is because it lacks the capital. Ironically, its main source of revenue is mineral royalties. However, in three out of the last six years, tribal government expenditures have exceeded these revenues, and it has been forced to dip into its accumulated capital reserves (see Table 11). Tribal capital

Table 11. Tribal revenues and expenditures in thousands of dollars

| Year                          | 1970   | 1971   | 1972    | 1973    | 1974   | 1975   |
|-------------------------------|--------|--------|---------|---------|--------|--------|
| Revenues                      | 17,989 | 26,448 | 19,561  | 26,316  | 20,583 | 27,549 |
| Percent derived from minerals | 45     | 51     | 41      | 28      | 49     | 70     |
| Expenditures                  | 18,537 | 21,381 | 25,928  | 29,928  | 20,209 | 27,057 |
| Excess (deficit)              | (547)  | 5,067  | (6,366) | (3,260) | 374    | 491    |
| Accumulated capital           | 47,597 | 54,131 | 47,443  | 47,420  | 49,725 | 45,112 |

Source: Financial statements (Navajo tribe 1971–1975).

available for investment during 1970–1975 fluctuated around \$45 million. A joint venture in uranium would cost the tribe \$25 million, in coal, \$50 million, and for a solely owned venture, double — (estimates based on Department of Interior calculations and Navajo Minerals Department). Obviously, if Navajos are going to enter joint or solely owned ventures, they are going to need federal loans, or advance mineral sales, or bond issues. Since their status as a local government equal to any municipality or state has not been recognized by financial markets, they cannot issue bonds.

A Navajo resource development authority should be created. Tribal exploitation of the resource would eliminate state taxation. The authority's equity and working capital would come from federal loans, tribal bonds, advance mineral sales. It could hire a mining company to do the actual exploitation just as in the Blackfoot-Damson agreement.

Working within the current capital constraints, the Navajo tribal government should increase its rate of investment in job-generating enterprises. Its rate of investment in tribal enterprises has not been

Table 12. Rate of investment in thousands of dollars

| Year                                 | 1970   | 1971   | 1972   | 1973   | 1974   | 1975   |
|--------------------------------------|--------|--------|--------|--------|--------|--------|
| Revenue                              | 17,989 | 26,448 | 19,561 | 26,316 | 20,583 | 27,549 |
| Cost of tribal enterprises           | 27,005 | 27,024 | 27,593 | 30,831 | 32,040 | 34,418 |
| Change in cost of Tribal enterprises |        | 18     | 569    | 3,237  | 1,209  | 2,377  |
| Rate of investment*                  |        | 0.0007 | 0.0291 | 0.1230 | 0.0587 | 0.0863 |

Source: Financial statements (Navajo tribe 1970-1975).

$$* \text{ Rate of investment} = \frac{\text{Changes in cost of tribal enterprises}}{\text{Revenue}_t} (t) - (t-1)$$

very stable nor adequate for development (Table 12). Most developing countries are urged to invest at least 20 percent of current income. Current tribal budgets reveal that the bulk of current revenue is spent on administration (31 percent) and social services (57 percent) (Table 13).

Table 13. Actual net expenditures, 1975

| Budget category             | Amount       | Percent | Type of expenditure   |
|-----------------------------|--------------|---------|-----------------------|
| Legislative                 | \$2,054,889  |         | Administration        |
| Judiciary                   | 395,490      |         | Administration        |
| Executive                   | 2,331,204    |         | Administration        |
| Administration              | 1,998,591    |         | Administration        |
| Controller                  | 455,541      |         | Administration        |
| Business management         | 499,628      |         | Administration        |
| Services                    | 835,287      |         | Administration        |
| Subtotal                    | 8,570,630    | 31      | Administration        |
| Division of law             | 3,204,013    |         | Service               |
| Operations                  | 4,005,318    |         | Resources maintenance |
| Education                   | 2,059,802    |         | Service               |
| Social Service              | 1,566,077    |         | Service               |
| Contributions-charity       | 126,608      |         | Service               |
| -NAPI                       | 1,876,000    |         | Job creation          |
| Continuing net expenditures | 3,205,825    |         | Emergency programs    |
| Revolving net expenditures  | 143,341      |         | Service               |
| No year expenditures        | 1,518,493    |         | Service               |
| NIP                         | 1,583,478    |         | Infrastructures       |
| Subtotal                    | 15,830,478   | 57      |                       |
| Other                       | 3,352,809    | 12      |                       |
| Total                       | \$27,753,917 | 100     |                       |

Source: Financial statement FY 1975 (Navajo tribe 1975)

### Uses of Capital

Even though the tribe has not been able to invest at a rapid rate, it is helpful to examine the types of investments they have made and their

contribution toward increasing employment and capturing an increased share of the value added (Table 14).

Table 14. Navajo tribal enterprises

| Enterprise                                  | Amount<br>invested<br>at cost | Number of<br>employees in<br>1974 |
|---|-------------------------------|-----------------------------------|
| Navajo Tribal Utility Authority             | \$ 17,299,296                 | 89                                |
| (in notes)                                  | 3,974,926†                    |                                   |
| Navajo Forest Product Industries (NFPI)     | 6,486,127                     | 644*                              |
| Navajo Housing & Development Enterprise     | 1,337,303                     | N.A.                              |
| (in notes)                                  | 1,200,000†                    |                                   |
| (performance bond)                          | 10,000,000†                   |                                   |
| Navajo Agricultural Products Industries     | 4,323,375                     | 209                               |
| Navajo Engineering & Construction Authority | 772,234                       | 218                               |
| (in notes)                                  | 500,000†                      |                                   |
| Navajo Arts & Crafts                        | 724,580                       | 56                                |
| Shiprock Motel                              | 316,274                       | N.A.                              |
| Navajo Aviation Authority                   | 716,200                       | N.A.                              |
| Revolving Credit                            | 2,397,723                     | N.A.                              |
| Wool Plant‡                                 | 65,084                        | N.A.                              |
| Window Rock Motor Inn‡                      | 136,000                       | 38                                |

Source: Financial statement FY 1975 (Navajo tribe 1975); *annual report* (Navajo Forest Products Industries 1975); *Overall economic development plan* (Navajo tribe 1974).

\* Figure is for 1976.

† Notes are actually held by the tribe or the tribe is a cosigner.

‡ The wool plant is merely a sorting operation and is not a bonafide enterprise. The Motor Inn did not appear in the 1975 statement and so was either omitted or sold.

The Navajo Tribal Utility Authority provides the Navajo with electricity, gas, and water. By 1973 nearly 40 percent of households had electrical service, but only 20 percent had water and sewer services. The OEDP (Navajo Tribe 1974) suggested that it is impossible to provide small outlying communities with electricity. This suggestion is ridiculous when one realizes that Navajo resources (namely coal and water) supply the Page, Mohave, and Fruitland generating stations which provide power for Phoenix and Los Angeles.

The ironies of NTUA operation have been described in detail by David Aberle. The NTUA buys power from an Arizona Public Service Company power plant near Fruitland, which burns coal supplied by Utah Construction and Mining Company from Navajo mineral leases. Thus, the Navajo buy back their coal in the form of electric current, which they sell at a profit locally (Aberle 1969: 255).

This is the ultimate economic absurdity: to export a resource in its crude form, and then import it in its processed form allowing non-Navajos to reap the value-added. We have explored the costs of mineral extraction (\$100 million for coal) but not for the generation of

electricity. The Navajos could supply their own power with the assistance of federal subsidies.

One of the oldest (1958) and most successful enterprises is the Navajo Forest Products Industries (NFPI). It now includes a sawmill, a bark-processing plant, a millwork and cut-stock plant, and a particle board plant. NFPI annually increases the return from the tribe's timber resource by allowing it to be sold as finished lumber instead of stumpage. The difference between stumpage receipts and lumber sales is \$6–8 million. This is the value-added from processing. Net profits average \$3 million a year. NFPI employs 644 Navajos and generates \$3 million in wages. The recent addition of a particle board plant allows it to make use of its waste material. At the dedication ceremonies Chairman MacDonald praised the new plant as a means to "employ more of our people and provide the economic self-sufficiency we all are looking for. It is incumbent on us . . . to extract the most benefit from our resources as possible — resources such as uranium, coal, oil, and timber" (*Navajo Times*, September 23, 1976). NFPI is the only tribal enterprise which annually repays part of the original tribal investment.

The continued growth of NFPI necessitated the development of the new town of Navajo: the Economic Development Administration (EDA) assisted by providing a business loan to NFPI of \$550,000, a public works grant of \$130,000 for town-site preparation, \$270,000 for a business loan for a commercial center, and \$160,000 for the town water supply. In this unique case, a viable industry sparked the development of infrastructure. A considerable body of economic literature is devoted to the question of whether infrastructure or productive enterprises should come first. It seems that the past 20 years of investment in infrastructure has generated little complementary investment in productive enterprises. Rather than waiting for spontaneous investment in productive activities, the tribe could initiate productive enterprises based on their natural resources.

The most ambitious development project undertaken by the tribe is the Navajo Irrigation Project on the San Juan River, which will increase irrigable land by 110,630 acres. The project was proposed more than a century ago and field surveys, preliminary reports, and feasibility studies were prepared between 1945 and 1955. In the interim, a proposal was made for the diversion of water from the San Juan to the Chama River to serve the growing city of Albuquerque. Laws were passed authorizing the necessary construction. The Navajo dam and reservoir were completed at a cost of \$22,822,624. The reservoir is the principal source of water to serve the irrigation project. In 1960 Senator Anderson introduced a bill to authorize construction of the irrigation project. Secretary of Interior Udall stated, "that

authorization of an irrigation development such as the proposed Navajo Indian irrigation project would implement the recognition given in 1956 of the nation's responsibility to help alleviate the severe economic distress among the Navajo people by providing them an opportunity to earn a respectable standard of living." The bill became law in 1962. But the Navajo will be lucky to see the completion of their project by the year 2000 due to federal impoundments of funds.

The first 10,000 acres of land on the project received water and were farmed in 1976. Ten thousand acres are to be added each year, but it is questionable if the Navajo tribe will be able to secure all 508,000 acre feet of water per annum assigned to them. The water in the San Juan-Chama system has been overcommitted and overestimated. The Bureau of Reclamation would like to cut the assignment and is claiming that the Navajos will not be able to "reasonably" use all 508,000 acre feet and insists that the water be used only for irrigation. The real problem is that if the Navajo take their full entitlement there will not be enough water for proposed coal gasification plants.

To control and develop the productive capacity of the 110,630 acres, the Navajo have established a tribally owned enterprise, the Navajo Agricultural Projects Industries (NAPI). The project is being developed as a tribal farm, but it is unlikely that one tribal agribusiness could efficiently manage 110,630 acres. Most economics of scale are obtained by the time a farm reaches 750 acres (Carter and Dean 1936: 264-277). Thus, 150 efficient-sized farms could be set up.

The actual organizational structure of the project should not be viewed as a strict "either-or" choice. There is room for a sizeable tribal farm as well as for a number of family farms of efficient size. Tribal farms and family farms could cooperate on a number of levels such as joint buying and selling, use of specialized farm machinery, and sharing of technology.

Either approach will generate 2,500 jobs during the peak growing season. Total development costs for irrigation, roads, and the farming enterprise will exceed \$400 million (personal communication from Bahe Billy, director, NAPI, April 30, 1976). The federal government is funding the irrigation project as required by law, but the tribal government must finance the farming enterprise.

In addition to planting the first 10,000 acres, NAPI has successfully run a small lamb feedlot since 1973.

Normally, Navajos sell their lambs a few at a time to various traders — when they need the cash, where the price is the highest, and sometimes where they have a debt to cancel.

Lambs produced on the Navajo range and in the Western states in general are sold as feeder lambs. In 1968 the average Utah feedlot



bought a lamb for \$19.43 and sold it for \$28.81, for an average net return per pound gained of 8 cents. The tribe has the opportunity to put low cost gains on light lambs by establishing a feedlot.

A tribal feedlot could take advantage of the annual price cycle for lambs (see Table 15). Generally, prices are at their peak in spring and

Table 15. Slaughter lamb prices: average per 100 pounds

| Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | July  | Aug.  | Sept. | Oct.  | Nov.  | Dec.  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 24.00 | 25.12 | 26.88 | 30.25 | 31.12 | 31.12 | 28.88 | 27.75 | 27.50 | 25.88 | 24.75 | 25.75 |

Source: U.S. Department of Agriculture 1972: 118

are lowest in late fall, when supply is greatest. If individual Navajos could sell to the feedlot in fall, the tribe could fatten the lambs and sell them the following spring at higher prices. The gain would accrue to the tribe instead of to a commercial feeder. Whether actual production is tribal, individual, or both, there are certain complementary activities that should be undertaken. Some have already been mentioned, such as joint buying, marketing, transportation of products, water delivery, provision of utilities, buildings, and maintenance. Other secondary activities could be developed, such as food processing and canning, which would create employment and increase the value-added of agricultural products. Canning and processing will require water, and so it is essential that the Navajo receive their full 508,000 acre feet. Primary and secondary agricultural activities and service-related activities are expected to employ 6,000 Navajos by the year 2000.

In 1971 the Navajo tribe was forced to undertake a tribal wool marketing program because of the collapse of the wool market. Shorn wool prices dropped from a high of 41.8¢ a pound in 1969 to 19.4¢ a pound in 1971. Traders were unable to even market Navajo wool, since domestic manufacturers could buy better quality wool at low prices. The Navajo tribe paid individual Navajo growers a fair selling price, plus an advance on incentive payments, minus handling costs. The program has been successful in finding buyers, in large measure because of the uniform product presented. The program offers advantages which traders cannot offer such as standardized grading and processing, and collective marketing to obtain the best prices. Reservation sheep produce about 3 million pounds annually, or 2 percent of national production. The program markets about 2.2 million pounds all over the world. There are tentative plans for the wool program to expand into fleece-scouring operations. Wool processing is not a novel suggestion. In 1876 John W. Young started a mill in Tuba City that was to use local Navajo wool, but it failed because Mormon women could make better cloth at home (Haskett 1936: 22-23). In 1949 the

Agriculture Industry Service, Inc., recommended a wool processing plant, on the premise that 1.5 million pounds of wool could profitably be bought, sorted, and sold to Eastern markets. This possibility has been demonstrated by the present wool program.

A wool spinning operation to process all Navajo raw wool could be set up for less than \$1 million. During scouring 3,036,522 pounds of raw wool (1971 wool clip) is subject to 65 percent shrinkage. Thus, 1,062,782 pounds of scoured wool would be yielded; 631,578 pounds of scoured wool produce 600,000 pounds of spinning yarn for Navajo weavers; the rest could be sold as clean wool to national or international buyers. The tribe has a good local market for semi-processed weaving wool, which many Navajo weavers prefer to buy from traders instead of processing themselves. The wholesale price of this yarn is \$2.25 a pound (1971), but it often retails at the trading post for \$3.80 a pound. By supplying semiprocessed woolen yarn at lower retail prices, the tribe could cut the price of woolen yarn to the weaver and also receive for itself a higher per pound price than from selling raw wool. In 1971 a pound of carpet yarn sold for \$1.17, compared with 19.4 cents for a pound of raw wool. Table 16 shows the relative returns from selling raw wool as the marketing program presently does, versus processing and selling it.

Table 16. Alternative investments

| Investment   | Price $\times$ pounds      | = Revenue   | - Costs    | = Profit    |
|--|----------------------------|-------------|------------|-------------|
| Raw wool sale  | $\$0.126 \times 3,036,522$ | = \$364,382 | - \$62,000 | \$302,382   |
| Wool processing  |                            |             |            |             |
| Scoured wool sale                                      | $0.66 \times 431,204$      | = 284,594   |            |             |
| Spinning yarn  | $1.17 \times 600,000$      | = 702,000   |            |             |
|  |                            | 986,594     | - 748,319  | = 238,275   |
| Wages  |                            |             |            | 209,900     |
| Social return (wages + profits)                        |                            |             |            | 448,175     |
| Weavers' savings (\$3.80-\$1.17)(600,000)              |                            |             |            | 1,578,000   |
| Total social gain (wages + profits + weavers' savings) |                            |             |            | \$2,026,175 |

Source: Ruffing 1973: 226.

The processing operation would yield a social return of \$448,175 (profits plus wages). This is \$145,793 more than is yielded by merely selling raw wool. If weavers' savings are included, total gain is a phenomenal \$2,026,175.

As a complementary activity to wool marketing and wool processing, an effective marketing service should be created for Navajo rugs. Most unmarketed Navajo wool, 800,000 pounds (1975), is used for making rugs. At present these rugs are marketed through the traders and the Navajo Arts and Crafts Enterprise. Neither has been able to form an

energetic marketing chain. The sale of Navajo rugs is dependent on tourists and intermittent sales to large department stores even though there is a growing market for craft articles.

Rug marketing must be on a tribal level and not on a chapter level, because the production of Navajo rugs is sporadic. In previous years there was a seasonal cycle; women produced more rugs during the long daylight hours of summer. Women now weave whenever they need the cash, so production is greater when other economic activities decline or when the chapter provides funds for weaving projects. Small chapter cooperatives have done poorly in the past, because they could not advance payment before they sold the rug. Because the weaver is usually in need of cash and can readily obtain credit from a trader with the rug, there is no incentive to use a marketing service unless it pays on delivery. If the tribe processed the wool, cut weavers' costs, and increased the price per rug by tapping urban markets, production would probably increase, because the weavers — women between 25 and 65 years — have the lowest opportunity cost on the reservation.

The tribal motels like most ventures in Indian tourism have consistently produced a deficit. A consultant on Indian tourism, Harry Clement stated, "It is difficult to make profits on tourism anywhere, much less on Indian reservations which are often located in remote areas" (American Indian Policy Review Commission 1976: 123, *Report*). Faltering tourism projects impose burdens on the tribe that they can ill afford since they are liable for the bad debts. But even if the projects were favorable they provide little employment relative to investment. The jobs are also seasonal and pay minimum wages. It is not surprising the tribes have overhired in an effort to provide more employment. In examining the balance sheets for the Window Rock Motor Inn and the Shiprock Motel, salaries either exceeded total revenues or were 70 percent of them. The tribe should defer investment in tourism since other projects will generate more employment. The Navajo can eventually capture tourist dollars if managers are trained, tourist facilities are placed in the scenic areas, and complementary infrastructure such as stores and restaurants are developed.

More recent ventures are the Navajo Housing and Development Enterprise, the Navajo Engineering and Construction Authority, and the Navajo Aviation Authority. These provide opportunities for Navajos to contract with the federal government for business that has been going to private, non-Navajo firms. Even though 4,000 housing units have been built on the reservation, this activity has had little impact on employment due to the lack of Indian contractors. The formation of the Navajo Engineering and Construction Authority is an attempt to increase the impact of federal spending by having Navajos participate directly in utility construction. The Navajo Housing and Development

Enterprise (NHDE) is supposed to develop middle-class housing. The tribe has directly invested \$2,109,537 in these companies, has accepted notes or cosigned notes for another \$1,700,000, and has guaranteed a \$10,000,000 performance bond for the enterprise. However, NHDE is suffering from the repercussions of the misdirected investment of \$13 million in HUD construction funds by the Navajo Housing Authority. NHDE's financial management has been less than adequate, and with the temporary interruption in funding they are on the verge of bankruptcy. Given that the Navajo housing deficit is so great and the rate of deterioration of federal housing so rapid, it is likely that with proper management a new tribal or private company could achieve the objective of making greater use of federal funds by generating employment as well as providing housing.

Another activity of the Navajo tribe is the operation of a revolving loan fund for the benefit of tribal enterprises and individual Navajo businesses. The fund \$2,397,723 (FY 1975) was hopelessly inadequate for the task. This lack of capital is the chief obstacle to the increase of Navajo retail establishments.

Since 1965 the tribe has been cooperating with a federal effort to attract non-Navajo manufacturing firms to the reservation. The tribe provides the facilities and sometimes the equipment. The government subsidizes the wage bill. The companies provide the management and working capital. Thus far, four plants, Fairchild Semi-Conductor, General Dynamics, Utah Navajo Industries, and Navajo Trailers have located on the reservation.

In 1967 the tribe spent \$600,000 in plant and \$220,000 in equipment to attract General Dynamics (see Table 17). With defense cutbacks, employment dropped from the original 250 to 75 (1974).

Table 17. General Dynamics set-up costs in 1971

| Investment                 | Investor | Amount    | Type of funding | Interest  |
|----------------------------|----------|-----------|-----------------|-----------|
| Fort Defiance              | EDA      | \$101,000 | Grant           | —         |
| Industrial Park            | Tribe    | 25,000    | EDA loan        | \$611,611 |
|                            | Tribe    | 17,000    | Own funds       | 11,360    |
| General Dynamics Building  | Tribe    | 600,000   | Own funds       | 48,000    |
| General Dynamics Equipment | Tribe    | 220,000   | Own funds       | 17,600    |

Source: Statistics supplied by the EDA 1971

The initial cost of job creation was \$3,852, which is very low compared to the industry average of \$30,000. In 1971 rentals from General Dynamics exceeded tribal interest payments and foregone interest on capital invested. Salaries generated amounted to \$480,000 annually.

Facilities were also provided for Fairchild Semi-Conductor at the

cost of \$3,301,267 (see Table 18). Fairchild, at its height, employed 1,200 workers. Job creation therefore cost \$2,751 per employee. Tribal interest payments to EDA and foregone interest exceeded the rental paid by Fairchild. Nevertheless, salaries contributed between \$4.5–5.6 million to the local economy. Thus, while the plant functioned, it was a very successful investment.

Table 18. Fairchild Semi-conductor set-up costs in 1971

| Investment         | Investor | Amount     | Type of Funds | Interest |
|--------------------|----------|------------|---------------|----------|
| Shiprock Ind. Park | EDA      | \$ 122,400 | Grant         | —        |
|                    | Tribe    | 30,600     | EDA loan      | \$ 705   |
| Shiprock Water     | EDA      | 1,000,000  | Grant         | —        |
|                    | Tribe    | 650,000    | EDA loan      | 24,375   |
| Facility           | Tribe    | 462,800    | EDA loan      | 19,665   |
|                    | Tribe    | 678,467    | EDA loan      | 28,834   |
|                    | Tribe    | 366,000    | Own funds     | 29,280   |

Source: EDA 1971.

In 1970 Fairchild Camera, the parent company lost \$19 million, in 1971, \$7.8 million. The company was adversely affected by the slow-down in defense activities and by the 1974 recession. In 1975 they radically reduced their labor force and American Indian Movement demonstrators occupied the plant in protest. This provided the company with the perfect pretext for closing down the operation.

Unfortunately, the Navajo will not be able to depend on branch plants for the industrialization of their reservation. Companies set up such plants during good times, and, since they have little invested in the facilities, close them down just as easily during bad times. The chief disadvantage of this operation is that the Navajos have no control over the decision to close down and have their scarce funds tied up in idle buildings. As Aberle has said, "This episode supplies further evidence that these industries were exotic growths . . . unrelated to the assets of the region, with minimal stakes in Navajoland" (Aberle 1976: 19).

Nevertheless, the tribe has not been deterred from its campaign of industrial promotion. Given an unemployment rate of 50 percent, the tribe is under great pressure to pursue any scheme that might generate employment. It hopes to lure other non-Indian companies onto the reservation with the promise of low cost facilities, access to Western markets, abundance of raw materials, and, most importantly, its inexpensive and readily available labor force. The only success it has had recently is the establishment of a glove manufacturing plant in a remote Utah area of the reservation. Forty people are employed. The remaining non-Navajo industry is Navajo Trailers, Inc. which employs

43 Navajos. Unlike Fairchild and General Dynamics it is not a branch plant, but a self-contained enterprise. Foot-loose industries account for 158 jobs, a disappointing record.

### *Lack of Managerial Skills*

In the preceding section we considered the effect of lack of development capital. However, in a few instances where the tribe invested its scarce capital the results were disappointing. Lack of managerial skill limited the amount of development capital that could be productively used. By now the tribe has learned that capital alone will not increase income or produce jobs.

Experience with the Navajo Housing Authority, the Navajo Housing and Development Enterprise, and two tribal motels reveals a lack of basic business skills and effective tribal control. Other ventures such as Navajo Forest Products and Navajo Agricultural Products demonstrate that well-trained key personnel can put scarce capital to effective use.

As was mentioned earlier, between 100 and 1,500 Navajo students go to college each year. Every effort should be made to ensure that they acquire the technical skills the tribe needs. Furthermore, once they have been trained there should be a mechanism to ensure that they return to the reservation. In examining a 1975 tribal government organizational chart (Figure 1) it appears that the tribal bureaucracy consumes much of the managerial talent of the Navajo nation. If some of the 19 separate offices were combined, competent administrators could be freed to manage new tribal enterprises or could become private entrepreneurs.

### *Lack of Commercial Infrastructure*

Federal, state, county, and tribal expenditures have little effect on the income of the Navajo nation because of leakages to the outside economy. Federal dollars which are used to buy nonreservation products never even reach Navajo hands. Those dollars which accrue to Navajos in the form of wages are usually spent off the reservation.

The multiplier allows us to calculate for a given expenditure what will be the impact on gross reservation product or income. If the government spends \$1,000 and the multiplier is 1.5, the gross reservation product will be \$1,500. A multiplier of 1.5 is very low and indicates an extremely underdeveloped retail and commercial sector. A metropolitan area such as New York–New Jersey–Connecticut has a multiplier of 3.36. The more isolated and the smaller the community,

the smaller will be the multiplier because smaller communities depend much more heavily on imports from outside. Much of the increased government expenditures in a small community "leaks out" through payments for imported goods and services.

While an income multiplier has not been calculated for the Navajo nation, a recent study on income and expenditures revealed some interesting facts (Wistisen 1975, vol. 2). Forty-nine percent of all household expenditures are made off the reservation. When the informants were asked why they left the reservation, the two major reasons given were to sell rugs and jewelry and to seek a job. The response is indicative of the poor marketing record of the Navajo Arts and Crafts Enterprise and the high rate of unemployment. The purchase of groceries and clothing ranked fourth among the reasons for leaving. In 1970 there were 196 commercial establishments on the reservation: 171 retail stores, 1 wholesale store, and 24 service establishments. As a result there was a very large number of potential customers per business (see Table 19).

Table 19. Customers per business

| Location           | Retail | Wholesale | Services |
|--------------------|--------|-----------|----------|
| Navajo reservation | 616    | 105,291   | 4387     |
| New Mexico         | 110    | 721       | 278      |
| Arizona            | 115    | 726       | 160      |
| United States      | 112    | 635       | 167      |

Source: Gilbreath 1975: 10.

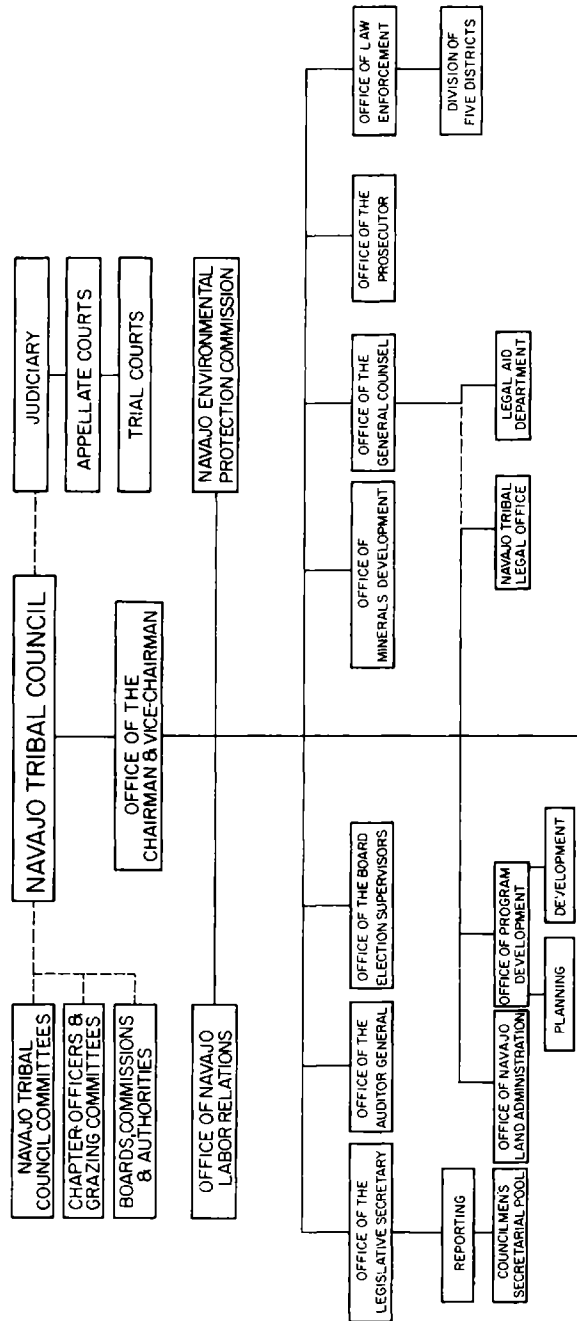
The difference is so great between the number of Navajo customers per business and the number of United States customers per business that there appears to be room for more Navajo commercial establishments. Navajo entrepreneurship has been impeded for a number of reasons, but largely due to the lack of capital. The Navajo Revolving Loan Fund is inadequate (\$2,397,723), and commercial credit is not available due to lack of collateral. The Navajo Small Business Development Corporation (NSBDC) was established to assist entrepreneurs to obtain capital. Between 1972-1975 NSBDC received only \$319,610 from the Small Business Development Administration. Under the 1973 Indian Finance Act, \$30 million was allocated for all Indians for small business grants of \$50,000. By 1976, the funds that had been appropriated were completely committed.

The survey also determined the leakages for other sectors of the economy. Retail establishments spent 77.3 percent of their revenues off the reservation. Most of these off-reservation expenditures were for

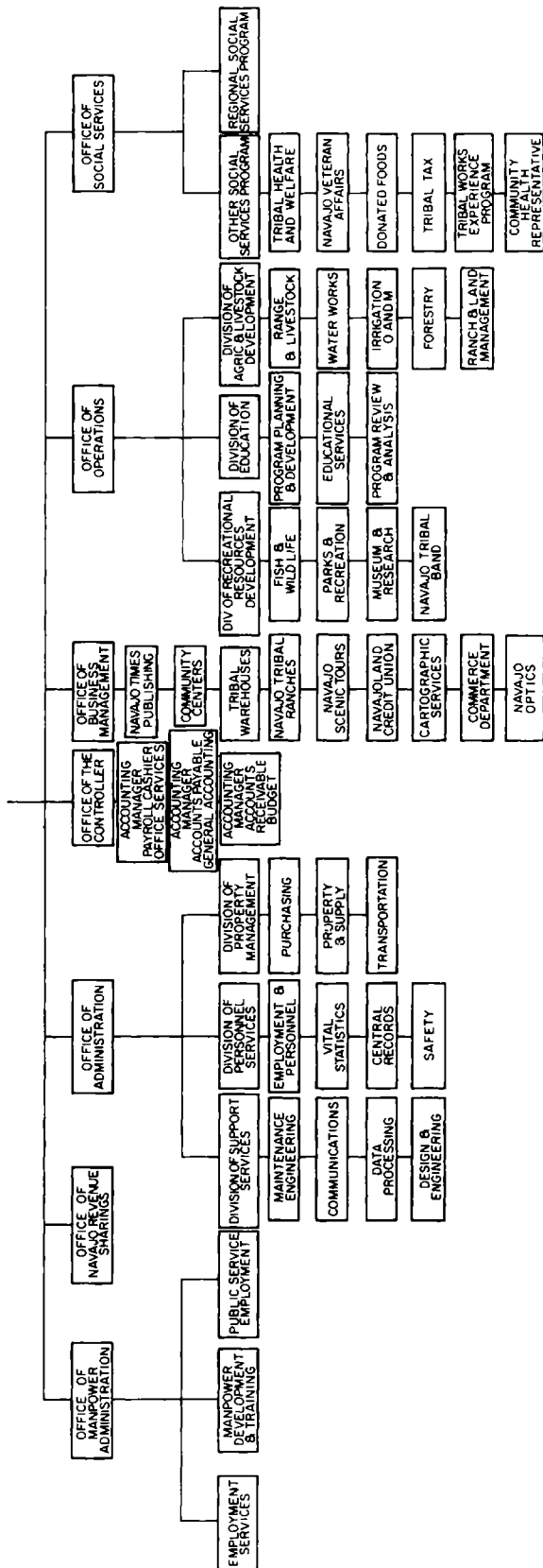
# THE NAVAJO TRIBE

## ORGANIZATION CHART

### 1975







general merchandise. Industries and manufacturers spent 62.6 percent of their funds off the reservation. Thirty-two percent of institutional expenditures were made off the reservation. Institutions had the smallest leakage because 61 percent of their funds accrued directly to reservation labor. Table 20 illustrates what items accounted for the 32 percent leakage. It is surprising that some of these expenditures are made off the reservation when the item could have easily been purchased on the reservation as in the case of lumber and laundry. In fact a group of Navajos from Tuba City wanted to start a commercial laundry facility but could not get an SBA loan because the BIA refused to guarantee them a 3 year contract. Instead the laundry was sent to a firm in Cortez, Colorado, 200 miles away (U.S. Commission on Civil Rights 1975: 36).

The income and expenditure study traced the effect of an additional dollar of household spending on the reservation economy. The household would spend \$0.59 on and \$0.49 off the reservation. The retail stores received \$0.57 and respend \$0.13 on and \$0.44 off the reservation. Firms received \$0.02 and respend \$0.0075 on and \$0.0125 off the reservation. For every dollar spent, about 12 cents of indirect income is generated on the reservation—a very low expenditure multiplier (Wistisen 1975, vol. 2, p. 141).

Table 20. Institutional expenditure leakage in thousands of dollars

| Item                    | Total   | On   | Off     | Leakage percent |
|-------------------------|---------|------|---------|-----------------|
| Auto and farm parts     | \$2,164 | \$66 | \$2,098 | 97.0            |
| Furniture               | 1,763   | 44   | 1,719   | 97.5            |
| Lumber                  | 5,320   | 677  | 4,652   | 87.3            |
| Minerals                | 131     | —    | 131     | 100.0           |
| Hardware                | 3,776   | 27   | 3,749   | 99.3            |
| Machinery and equipment | 2,435   | 82   | 2,353   | 96.6            |
| Office supplies         | 2,310   | 80   | 2,230   | 96.6            |
| Food                    | 4,938   | 327  | 4,611   | 93.4            |
| Laundry                 | 1,003   | 0    | 1,003   | 100.0           |

Source: Wistisen 1975, vol. 2, pp. 126–127.

### *Conflicting Philosophies*

The last obstacle to development is the neglect by modern Navajo bureaucracy of the traditional sector. Until recently they have ignored the desires of traditional Navajos, and they have not invested in traditional economic activities. Such neglect is no longer possible for political and economic reasons.

The Navajo tribe has a tripartite government with legislative, executive, and judicial branches. The tribal council (legislative branch) is composed of 74 members elected by Navajos from 102 chapters on the reservation. It has standing committees and an advisory council that exercises the tribal council's powers when it is not in session. The executive branch consists of the chairman, vice-chairman, and numerous administrative departments. The chairman usually prepares the agendas for the tribal council for review and debate. The councilmen are at an immediate disadvantage in that they have no offices and no staff to provide information about the issues the chairman has presented (Robbins 1976: 18).

Furthermore, most councilmen spend a large share of their time attending to local matters on the chapter level, rather than having time to study issues of tribal-wide importance. If the councilmen cannot obtain information to make intelligent decisions, they will not be able to adequately inform their chapters of the issues. Often the councilmen have been asked to ratify *de facto* decisions or negotiations made by the administration. This resulted in serious economic consequences for the tribe. In the case of the Exxon agreement, the council was asked for its approval after the contract conditions had been decided. As a result, a former councilman filed suit in December 1976 to block the Department of Interior approval of the lease by alleging that the environmental impact statement is inadequate. This new delay might result in additional foregone interest from the bonus which is in escrow.

Exclusion from the initial decision-making process has been the source of great bitterness between the council and the chairman. It is lamentable because there is probably a great deal of consensus on development. Traditional councilmen and modern administrators feel that the resources should be used for the benefit of the Navajo people. Peaceful coexistence with plenty of aid and no strings attached is what all Navajos would like to enjoy. They want the reservation "developed" so they and their children can stay near home, and they want to avoid relocation, off-reservation work, and boarding schools. They need jobs, houses, schools, and hospitals.

Given this basic consensus it is unfortunate that a dichotomy has occurred between the "modern elite" administrators and the people at the grass roots. The executive branch relies heavily on its own personnel for the initiation and development of projects for the Navajo nation. The chapters are not involved in any real development planning. They merely participate in programs once they are initiated. Local communities are less interested than the executive branch in "national" development. They want roads, schools, wells, bridges, hospitals, sheep, and jobs—and if not jobs, then welfare checks. Indeed, with the exception of the wool program, the tribal projects

reviewed did not affect the local community. If he is to benefit the traditional Navajo must go where the project is located.

Before 1974 when an intensive range restoration and range management education program was announced, almost all Navajo development planning by-passed the traditional livestock economy. Yet the Navajo tribe estimates that 35,000 Navajos (5,000 families) engage primarily in traditional agriculture, and the majority of the population obtains at least supplemental income from livestock activities.

In the FY 1975 tribal budget most of the funds were committed to administration and maintenance of resources and to emergency programs necessary to prevent severe economic hardship in the traditional economy. No expenditures appear for range restoration (Table 21). Eight percent was for water (both human and livestock) and sewer development in local communities.

Table 21. Tribal expenditures on traditional activities (FY 1975)

| Account                               | Amount      | Purpose                        | Percent of total budget |
|---------------------------------------|-------------|--------------------------------|-------------------------|
| Division of Agriculture and Livestock | \$24,510    | Administration                 | 0.0009                  |
| Range and Livestock Department        | 457,049     | Administration and Maintenance | 0.0165                  |
| Range and Land Management             | 76,332      | Maintenance                    | 0.0027                  |
| Livestock Marketing                   | 28,360      | Marketing                      | 0.0010                  |
| Water Works Department                | 2,307,368   | Community Water Development    | 0.0831                  |
| Irrigation O & N Department           | 347,104     | Maintenance                    | 0.0125                  |
| Emergency Haylift                     | 14,891      | Emergency                      | 0.0005                  |
| Emergency Feed Grain                  | 259,216     | Emergency                      | 0.0093                  |
| Emergency Water                       | 129,563     | Emergency                      | 0.0046                  |
| Total                                 | \$3,644,393 |                                | 0.1300                  |

Although the tribe is aware of the need to upgrade productivity in the traditional sector, it has not enacted any program capable of so doing. It undertook the wool marketing only because the wool market collapsed, leaving Navajo growers without an outlet. Fortunately, the utility of the program has become obvious to Navajo administrators and in FY 1975 the tribe invested \$65,084 in a wool processing (sorting) plant. The neglect of the livestock economy is the result of the belief that stock raising cannot yield an adequate living for the entire Navajo population. But no one activity will solve the economic problems of the Navajo, and continued neglect of the livestock economy ensures that eventually it will be unable to provide even supplemental income, further increasing Navajo dependency on welfare.

Because most Navajo still receive supplemental income from their small herds, investment in the livestock economy would benefit a large part of the population. Investment in industrialization will reach only young, educated Navajos in the immediate vicinity of the industry, but

investment in livestock will reach a majority of Navajo families, regardless of education, age, or location.

The neglect of the traditional economy is probably just another manifestation of the gulf between grass-roots councilmen and Window Rock administrators.

The Navajo executive branch might also be accused of a schizophrenic attitude toward development. The Overall Economic Development Program states "... it is not the policy of the tribe to preempt Navajo entrepreneurs who are capable. Rather, it is tribal policy to pursue tribal development possibilities in a manner that will foster Navajo entrepreneurship and encourage the development of the private sector in related activities" (Navajo Tribe 1974: 72). If one interprets this literally, it is the Navajo businessman, driven by profit-maximizing motivations, who should create jobs for other Navajos. Accordingly, the only valid role for the tribal government is to create those conditions whereby these entrepreneurs can prosper. Since there is no developed Navajo private sector, the tribal government has been forced to assume a major role in promoting development. However, the tribal government views its involvement as short run. It is crucial to distinguish which sectors are appropriate for tribal action and which can safely be left to Navajo entrepreneurs. Obviously, the development of Navajo tribal resources should be a tribal activity. The benefits from oil, gas, timber, land, and water should accrue to all Navajos, since they are the collective owners of these resources.

Fortunately, the tribe has developed some of these resources through tribal enterprises, so that theoretically all Navajos have an opportunity to benefit. The most appropriate spheres for individual Navajo entrepreneurship are the retail, service, and construction activities. Here, whatever profit an entrepreneur makes will have originated from his own efforts and not from the use of tribal resources. Entrepreneurs might also engage in manufacturing provided they pay fair market value for whatever tribal raw material they use.

Thus, there is room for both tribal and entrepreneurial initiative in development. Tribal leaders should reconsider what is the proper scope for tribal and entrepreneurial action not from the point of view of how the dominant society functions, but from the point of view of the values of Navajo society.

## FEDERAL EFFORTS TO PROMOTE ECONOMIC DEVELOPMENT

As every federal official knows, the federal effort to promote Indian economic development is underfunded, uncoordinated, and based on

legislation which does not realize the unique position of American Indians. The only agencies with programs to promote economic development in terms of job creation or job training are the Bureau of Indian Affairs (BIA), the Economic Development Administration (EDA), the Small Business Administration (SBA), and the Department of Labor Manpower Administration. These four agencies' appropriations for development accounted for approximately 15 percent of the total federal FY 1976 Indian Budget (Table 22). It is questionable how representative these figures are of the magnitude of annual appropriations or if they really represent expenditures on job creation and training. For example, transportation expenditures are also included in the budget of the Office of Resource Development. The additions to the Revolving Loan Fund and Loan Guarantee are special appropriations which end in 1976.

Table 22. Agency spending on Indian economic development, FY 1976 in millions of dollars

| Agency                                     | Amount  | Purpose   |
|--|---------|---|
| BIA Office of Tribal Resource Development  | \$86.5  | Enterprise development, manpower training, transportation |
| BIA Revolving Loan Fund and Loan Guarantee | 32.0    | Capital formation   |
| EDA Indian Desk                            | 32.5    | Public works, business loans planning                     |
| DOL Manpower Administration, Indian Desk   | 67.9    | Manpower training   |
| SBA  | 8.5     | Business loans  |
| Total                                      | \$227.4 |   |

Source: Napoli report (American Indian Policy Review Commission 1976).

One of the difficulties of the current federal method of promoting Indian development is that the funds are dispersed among a number of agencies which are unable or unwilling to coordinate their activities. For example, more than one agency is responsible for supplying some essential factor necessary for development projects: DOL supplies manpower training; EDA supplies public works, business loans, technical assistance, planning; SBA supplies business loans; BIA supplies business loans and grants, manpower training, and technical assistance. However, each program operates in a vacuum, manpower training is provided for nonexistent jobs; non-Indian enterprises are attracted to reservations which lack trained manpower; Indian enterprises are started but often lack trained manpower, management, and working capital. Such difficulties have been adequately elaborated in two 1975 General Accounting Office reports: *Improving small business opportunities on reservations* and *Better overall planning needed to improve the standard of living of White Mountain Apaches of Arizona* (Comptroller General of U.S. 1975).

The recommendations of both reports were identical: that the Office of Management & Budget set up an interagency coordinating committee. Two full years later (1977) the federal agencies involved are unable and unwilling to set up or participate in such a committee.

Federal efforts are also hampered because the enabling legislation authorizing programs ignores the unique status of American Indians or is interpreted in such a way that American Indians are ineligible. For example, under Title I of the Comprehensive Training and Employment Act, funds are provided to local governments. However, DOL does not consider Indian tribes as local governments.

The Public Works and Economic Development Act of 1965 allows EDA to provide 100 percent financing for a public works project. However, for a tribally owned business, EDA can only contribute part (50–80 percent). Since Indian tribes do not have access to commercial credit to raise the remaining capital required, they have opted to apply for public works projects instead of starting tribal businesses.

SBA has three types of loan programs: direct loans, indirect loans, and guaranteed loans. Actually, Indians receive only direct loans and guaranteed loans, because SBA has not been able to put pressure on banks to make indirect loans. The following excerpt from a Small Business Administration letter of April 30, 1975 points up the problems of Indians seeking to do business with SBA:

...corporations chartered by Indian tribes to carry out business projects are not eligible for SBA assistance unless such businesses are incorporated under state law. If the private profit subsidiary will operate within the private enterprise system, i.e. operate for a profit, pay corporate taxes, and produce distributable income for its stockholders, it would be eligible...it is our opinion that, unless a business entity is formed subject to the laws of a particular state subject to the taxes and regulations of like enterprises, that business entity is not operating within the competitive free enterprise system which is contemplated by the Small Business Act (Napoli 1976).

Thus a tribally owned business would not qualify for an SBA loan because it is outside the system as defined by the federal bureaucrats.

The Navajo Area Office of the BIA spends very little on reservation development. Seventy percent of the FY 1972 budget went for education and welfare, 12.8 percent for infrastructure, and 1.8 percent for resource maintenance. The BIA allocated \$154,900 out of \$108.8 million to promoting industrial development (Table 23).

The BIA suffers not only from lack of development funds, but also from clear-cut development plans. Aberle explains the deficiencies of the BIA: "The BIA is what local and national popular pressures and Congress have made it; an understaffed, underbudgeted operation with no control over many salient factors that would make a difference" (Aberle 1969: 243).