

GOVERNMENT POLICY AND INDIAN NATURAL RESOURCE DEVELOPMENT

JAMES S. FRIDERES,
Department of Sociology,
University of Calgary,
Calgary, Alberta,
Canada, T2N 1N4.

ABSTRACT/RESUME

Since the middle of the century Indian people have sought to develop many natural resources on reserve land. A series of different federal and provincial regulations covering various kinds of development have hampered Bands in their efforts. Several options are possible for development strategies, all of which have both advantages and disadvantages. The author outlines the regulations and the present state of resource development, and points out some dangers which lie ahead.

Depuis le milieu du siècle, les Indiens cherchent à développer les ressources naturelles des terres de leurs réserves. Une série de règlements fédéraux et provinciaux relatifs à certaines formes distinctes de développement, a pourtant entravé les initiatives entreprises par les bandes dans ce domaine. Il existe, à cette fin, plusieurs stratégies possibles pour assurer ce développement, les unes et les autres comportant toutefois avantages et désavantages. L'auteur présente les divers règlements régissant l'exploitation des ressources naturelles, et décrit l'état présent du développement de celles-ci, tout en indiquant les dangers toujours à craindre.

Introduction

Only recently has the economic potential of Indian reserves received serious attention (Stillwagon, 1984; Koovos and Brown, 1980). In the United States, the Miriam Report (1928) was the first comprehensive assessment of Indian lands and became the spring board for the implementation of the Indian Reorganization Act of 1934. Since that time, few assessments have been made with regard to the economic impact of the natural resource potential on reserves. Recently two studies, one in the U.S.A., the other in Canada, have been carried out to assess the economic potential of reserves.¹ The present study will assess the economic potential of natural resources on Canadian reserves today. It will also identify the existing federal and provincial policy toward developing Indian resources. Finally, it will assess the likelihood of natural resource development on reserves and its implications with regard to Indian economic development.²

Indian people in Canada are a colonized people. Economically speaking they are an underdeveloped internal colony. The poverty, poor health, under-education and high mortality rates which characterize Indian people in Canada, are not causes for their underdevelopment, but rather a consequence of their underdevelopment (Aberie, 1970). Furthermore, this state of underdevelopment limits the future economic options open to them. As Bankes (1983) points out, effective control over resources is a prerequisite to the achievement of meaningful self-determination as well as a beginning to the process of decolonization.

If economic and political development are to occur on the reserve, some sort of proprietary right for Indians is necessary.³ In short, this right would allow Indians to manage, lease and control access to resource development, as well as give them the right to all revenues and profits generated from the development. However, before making decisions about natural resource development, we must first determine whether or not natural resources, both renewable and non-renewable, are prevalent on reserves. Secondly, we must assess government policy to determine whether or not it is possible to develop resources.

The economic development of Indian lands has not progressed beyond the "Agricultural" (primary processing) stage. In a recent survey carried out by Environment Canada in 1979 (for southern Canada), it was found that 700 thousand hectares of reserve land could be classified as class 1-3 (prime agricultural land). However, the total area of reserve land per capita has decreased and will continue to decrease. For example, in 1959 the Department of Indian Affairs and Northern Development calculated 14 hectares per Indian currently living on reserves. Preliminary estimates show that by 1991 this will be reduced to less than eight hectares per Indian. Nevertheless, further attempts are being made to increase the productive capacity of existing farm land, as well as to convert potential agricultural land to actual agricultural use.

Indian land is also endowed (unevenly) with other assets such as timber, water and minerals.⁴ Forest lands cover nearly forty percent of the total reserve acreage and provided an income of over eight million dollars in 1975. Other reserve lands have potential for maintaining waterfowl and game which could

be used in promoting commercial recreation. Still other lands (particularly those near large metropolitan centres) are being developed to provide areas of "exclusive" housing mainly for non-Indians.

All of this suggests that over the past two decades Indians have contributed to the overall Canadian economy, albeit in a small way. This small contribution reflects an interest on their part in participating in the larger Canadian economy. The most recent, and as of yet untapped, resource to be developed is in the area of minerals. The federal government has provided some financial support for Indian bands to develop their natural resources and to become further integrated into the overall economy.⁵ However, the Indian Inuit Affairs Program budget reflects other priorities, such that economic development received only seven percent of the 1978/79 budget. The lack of financial and policy concerns by the federal government with regard to Indian natural resource development has retarded progress in this field, particularly in Quebec and the Maritimes, and has placed Indians wanting to develop their natural resources in a very disadvantageous position when dealing with natural resource developers (usually multinational corporations).

Reserves are scattered across Canada, and vary from a few acres in Nova Scotia and British Columbia, to large reserves such as those in Alberta. However, reserves have yet to be established in the Northwest Territories and the Yukon, even though in the case of the Northwest Territories, treaties were signed and provisions were made for the establishment of reserves. The initial selection of land for the placement of the reserves was based on many criteria, although agricultural potential as well as lands meeting the needs of a subsistence economy were the most important. The assessment of natural resources on the reserve (with some exceptions, such as gold) was never a concern for establishing reserves. It has recently come to light, however, that a number of reserves are amply endowed with important natural resources. For example, oil and gas development in Canada has become increasingly important. In 1980-81, royalties received from oil and gas development on Indian land totalled approximately \$140 million. In addition, rental revenues were approximately \$1.2 million. Estimates for 1981-82 are \$166 million and \$1.4 million respectively. While this is much less than comparable figures for the U.S.A., they do reflect a growing involvement in mineral development by Indians.⁶

Government Policy

During the mid-1960's, the federal government introduced a policy of devolution. The major thrust of this policy was that more responsibility should be shifted from the federal government to the Indians themselves.⁷ Prior to this, the federal government (under the Indian Affairs Branch) took full responsibility for all Indian matters under the Indian Act. Under the jurisdiction conferred by Section 91 (24) of the Constitution Act (1867), the federal government accepted responsibility for Indians and lands reserved for Indians.

However, as pointed out above, changes are taking place so that Indians themselves now have to make some decisions that deal both directly and in-

directly with matters that will affect their way of life. Whether or not they should pursue an aggressive "development" policy is just one of these areas. The decision to develop or not must be framed in both a short and long term perspective. Often short term benefits are so attractive that long term impacts are ignored and/or minimized. On the other hand, not to develop existing resources could mean that they will remain undeveloped, at least in the near future. Indians in the U.S.A. have also had to make these decisions, although this has led to the creation of an active Inter-tribal organization, The Council of Energy Resource Tribes (CERT). Canadian Indians have not made a move in this direction.

Natural Resource and Mineral Policy

The Department of Indian Affairs and Northern Development developed mineral regulations with regard to Indian lands in the mid to late 1950's. Major amendments to the regulations were made in 1966, 1974 and 1977. Under existing law, the Indian Minerals Directorate is responsible for the management and direction of the mineral resources of Indian lands under the authority of the Indian Act, the Indian Oil and Gas Act, Indian Oil and Gas Regulations and the Indian Mining Regulations. The Governor in Council may make regulations respecting the granting of leases, permits and licenses for the exploration of oil and gas on Indian lands. However, all royalties are paid to "Her Majesty in right of Canada," in trust for specific Indian Bands.

Before any mineral or hydrocarbon development can take place on Indian lands, the Indian Band for whom the land is set aside must make an appropriate surrender of the minerals and the mining rights under the proposed development to Her Majesty (in right of Canada). The conditions are outlined in sections 37-41 in the Indian Act. These sections state that no lands in a reserve shall be sold, alienated, leased or otherwise disposed of until they have been surrendered to Her Majesty by the Band for whose benefit in common the reserve was set apart. The surrender made to Her Majesty must be assented to by a majority of the electors of the Band and accepted by the Governor in Council.⁸ After the Indian Band has surrendered its mineral interests (under the conditions of the Indian Act), the mineral rights may then be administered under the Acts identified above.⁹

The Manager of Indian Minerals of the Department of Indian Affairs and Northern Development then disposes of oil and gas rights on Indian land. The manager, through advertisement, calls for tenders (with specific conditions attached) in respect to each parcel of land for which a permit or lease is to be granted. Under certain conditions the manager may, in consultation with the Band Council, negotiate a lease without going to tender (section 7(5), Indian Oil and Gas Regulations).¹⁰

Although a mineral surrender by a Band provides full authority to DIAND to manage the mineral rights, the Band Council is usually consulted and its consent sought before proceeding with any final disposition of mineral rights. In fact, there is a continuous effort by the Indian Minerals Directorate to en-

courage Indians to become more involved in the management of their mineral resources.

Unless otherwise specified in the call for tenders, or in a negotiated agreement, the royalties from mineral development are paid to the Receiver General of Canada. These royalties, as well as rentals (from permits or leases) and bonus monies realized from a "sale of mineral rights" or a negotiated agreement, are deposited in the Band's Revenue or Capital Accounts. This "Indian money" can be expended only for the Indians or Bands for whose use and benefit it is held.¹¹

The categories of Capital and Revenue monies determine the types of expenditures made. The Minister of Indian Affairs and Northern Development can, with or without the consent of Council, use monies for certain expenses. Specifically, the minister may (with Council consent) authorize and direct the expenditures of Capital money of the Band

to distribute per capita to the members of the band an amount not exceeding fifty percent of the capital monies of the band derived from the sale of surrendered lands (Indian Act, section 64[a]).

Occasionally, individual Indians are entitled to some or all revenues from mineral activity if they are holders of a Certificate of Possession or a Location Ticket and the Band Council agrees.

Beyond the specific Federal statutes which control natural resource development on reserves, there is another level of government which enters the scene. Of fundamental importance in the management of mineral resources on Indian lands, is the existence of provisions of various federal/provincial agreements in relation to the ownership of natural resources and to the subject and amount of benefits from the development. The specific agreements vary considerably across Canada.

The Constitution Act (1867) provided for the then existing provinces, Quebec, Ontario, New Brunswick and Nova Scotia, giving them the administration and control of their natural resources under section. 109. This same Act, under section 91, gave the federal Crown legislative powers with respect to Indians and lands reserved for Indians. The provinces of New Brunswick and Nova Scotia agreed in 1959 that the benefits resulting from mineral development from Indian lands would go to the Indian people for whom the land was set aside as long as the Band did not surrender all its interest in the reserve; that is to say, an absolute surrender. The provinces of Manitoba, Alberta and Saskatchewan were given administration of their natural resources by separate Acts in 1930 (Natural Resources Transfer Acts). Under the authority of these Acts, the Department has collected all revenues from mineral development on Indian lands for the benefit of the Bands that is, one hundred percent of the revenue.

An agreement with the Province of Ontario in 1924 provided that the federal government collect the monies generated by mineral development. These monies were to be divided 50-50 between the Province and the Federal

government, with latter's share going to the Band concerned. The Ontario government has waived this provision in several cases. As well, some Indian reserves (as in Treaty No. 3) were not subject to the 1924 agreement. The 1924 agreement is being reviewed, and it is hoped that Indian people will receive 100 percent of the benefits in the future.

In 1943, an agreement with the Province of British Columbia was entered into, on the assumption that the Province owned the precious minerals (gold and silver) and the Federal Crown owned the basic minerals of Indian lands. Under this agreement, the Province collected the monies from mineral development with 50 percent of the monies going to the Federal Crown for the benefit of the Indian Band. As the benefits to the Indians under this agreement have been inconsequential, the Department of Indian Affairs is in the process of renegotiating the agreement to secure improved benefits for the Indian people.

There is no agreement with the Province of Quebec, which claims all interest to minerals if a Band surrenders this interest. Therefore, the Bands are not encouraged to consider developing the mineral resources until the Indian people are able to receive some benefits. There are exceptions to this statement, that is, some Indian reserves are excluded from Quebec's claim depending on how and when the reserve was established. There are no agreements with the Provinces of Newfoundland and Prince Edward Island.

We now turn to investigate what types of natural resources are on Indian lands, and the availability of these resources. Mineral resources on Indian lands in Canada, with some exceptions, remained underdeveloped until mid-century. With the discovery of the Leduc oil field in Alberta, nearby reserves such as Stony Plain and Pigeon Lake were also caught up in the extraction. Mining developments on reserves have not been as numerous due to jurisdictional problems, lack of financial incentives, and the potential disruption to residents on reserves. As a result, there were fewer than ten mineral leases on Indian land by 1980 (Irwin, 1968; Bankes, 1983).¹² The Indian Minerals Directorate (Reserves and Trust Branch) has recently conducted a survey of most reserves with regard to potential mineral development. The Directorate identified and evaluated the known and potential mineral occurrences on or near Indian reserve lands based upon available geological, geophysical and geochemical data.

The reserve-by-reserve evaluation of mineral potential is divided into four categories: metals, non-metals, structural materials and oil and gas.¹³ Data was available to indicate oil and gas leases and permit activity conducted by industry in the private sector on specified reserves in each region.

Mineral resources are not evenly divided across tribal lands in either quality or quantity. Table 1 identifies the number of reserves for each area of Canada which have potential (and in some cases actual) minerals.¹⁴ Using criteria discussed above, we found that the percentage of reserves having at least one potential mineral of commercial production varied from 13 percent (Manitoba) to 63 percent (Alberta). However, the types of minerals on the reserves varied considerably. For example, 45 percent of the reserves in Alberta held exploratory leases, permits, had shut-in wells, and/or were producing oil or gas, while no gas/oil exploration or production was evident in the Atlantic provinces.

TABLE 1: Distribution of Reserves having Mineral Potential by Region

	Type of Mineral								Had at least one Resource		Total reserves a
	Metal		Non-metal		Structural Material		Oil/Gas		N	%	
	N	%	N	%	N	%	N	%			
Atlantic	14	20	9	13	8	12	0	0	19	28	64
Quebec	8	18	3	7	5	11	0	0	11	24	39
Ontario	28	14	7	4	26	13	8b	>5	51	26	171
Manitoba	10c	8	2	2	3	2	1	1	16	13	103
Saskatchewan	21d	15	14e	10	10	7	5f	3	47	33	124
Alberta	1	1	15g	16	29	32	45h	49	57	63	91
British Columbia	69	4	8	<1	35	2	6	<1	106	9	1629
	2221 i										

- (a) Total number may not equal actual number of reserves that exist. Information is not available as to the mineral potential of some reserves.
- (b) Three-fourths of these mineral deposits are in the London district.
- (c) All of these potential minerals are in the Island Lake District and relate to gold and base metals.
- (d) All are in the Prince Albert District.
- (e) 9 of 14 are in Touchwood, File Hills, Qu'Appelle District.
- (f) On the five reserves, there are no producing wells, six leases (shut-in), 22 exploratory leases and 1 permit.
- (g) 7 of 15 are in Blackfoot, Stoney, Sarcee District, 8 of 15 in Edmonton, Hobbema District.
- (h) On the 45 reserves, 110 leases are producing, 30 leases are shut-in wells and 614 leases are for exploratory work.
- (i) According to official statistics, there were 2,281 reserves and/or settlements in Canada as of 1977.

Overall, nearly all of the mineral activity on Indian lands in Alberta was related to oil and gas development. However, this represents less than two percent of the total value of marketable production (including synthetic crude oil) for Canada in 1979. Over 90 percent of total Indian oil and gas revenues go to Alberta reserves. In fact, 81 percent go to five reserves in Alberta with 17.7 percent going to the remaining reserves. An additional .2 percent go to B.C. and Saskatchewan reserves with .5 percent going to all other Canadian reserves.

Using available Statistics Canada data, we were able to calculate the value of the marketable production for non-metals, metals and structural materials by province for the year 1979. Next, we calculated the percentage of Indian lands that had a rating of "good" (6 or more) in each province. Then, using the assumption that "the quality of Indian lands compares favourably with the

National pattern" (D.I.A.N.D., 1980:65), we multiplied this percentage by the total provincial value of marketable non-metals, metals and structural materials.

For example, in the Atlantic provinces, Indian lands comprise about .0012 percent of the total land. However, not all reserves were equal in "potential", overall or within one of the three categories of non-metals, metals and structural materials. Hence, the area of those reserves rated 6 or more was calculated and multiplied by the total Atlantic production in that one material area, such as non-metals. In the case of the Atlantic provinces, total marketable production for the three areas was: non-metals (\$1.3 billion), metals (\$113 million) and structural materials (\$300 million).

Only 13 percent of the reserves held a rating of 6 or more in the area of non-metals, comprising an area of .0010%. This was then multiplied by \$1.3 billion, the total Atlantic marketable production value. The resultant figure of \$1.3 million represents a potential marketable production on non-metals for reserves in the Atlantic Provinces. Similar calculations were made for materials for each province. Final calculations show that the total marketable production of non-metals, metals and structural materials per year would be approximately \$15 million.¹⁵

Comparable figures for gas and oil have not been calculated because of a lack of data. However, because of the close correspondence between oil and gas production and the province of Alberta, we could assume that the current ratio of 80 percent from Alberta and 20 percent from elsewhere in Canada would continue. Hence, excluding Alberta oil and gas revenues, one could add an additional 1 million dollars to the annual income derived from natural resources on Indian lands. Of course, if income generated from Alberta oil and gas revenues are added to the above figures, the annual income would soar to well in excess of \$100 million per year.

The above figures are, of course, to be viewed as one estimate of potential. The method of calculation used for economic potential has several problems. For example, it does not take into consideration such factors as market conditions or "scope of economy" necessary for initiating the development of the resource. Nevertheless, it does give a sense of the potential value of non-renewable natural resources presently on Indian lands.

Strategies and Cost of Development

The above data suggests that a modest income could be generated through the development of natural resources on reserves. However, in order to develop these resources, that is, bring them into production, some costs would be incurred. The actual cost of developing the natural resource is directly related to the type of agreement the band enters into with government or private industry in order to develop the resource. We will discuss three types of agreements Indians could enter into: the concession, the joint venture and the service contract.

The concession: This strategy has been the traditional way in which Indians

(through the federal government) granted a company mineral production. The company makes a direct equity investment for the sole purpose of extracting a resource (Bankes, 1983). As Asante (1979) points out, in many cases, the concession amounted to a virtual assumption of sovereignty over the host country's resources by transnational corporations. Under these conditions the corporation asserted ownership not only of the fixed assets, but also the natural resource itself (Bankes, 1983).

Under a concession agreement, there is very little direct "up front" cost for the band. Nor are there any operating costs. In addition, these agreements are easy to administer as the needs for supervision, auditing and training are minimal. In short, the cost for the band is relatively small. Correspondingly, the return to the band is also minimal. Indians also find that this type of agreement does not encourage the training of local residents to assume jobs in the industry, thereby introducing them into the wage economy.

The joint venture: This means that there are two (or more) parties which pool their interests, such as money, technical expertise and land, in order to develop a project. There are two varieties worthy of mention. The first is where a separate legal entity is created which is jointly owned by the parties involved; both Indians and the development company. The second type does not involve the formation of a separate company, but rather the parties to the venture have a direct undivided working interest in the project.

The joint venture type of agreement requires that Indians (i), have the technical expertise, and (ii), have some "interest" which is considered valuable by the other party, such as land and mineral rights. In short, there is both a direct and indirect cost to this type of development. Conversely, the joint venture generally presents an opportunity for the local people to increase their control over the development, may increase revenues to Indians, and allows for a flexible method of collecting revenues (Bankes, 1983; Asante, 1979).

The service contract: Under agreements of this type, the status of Indian ownership over the natural resource is reaffirmed. Thus, rather than transferring the title of the resource (as in concessions) to the developing company, the band simply hires the corporation as a contractor or business partner to perform a specific task for a specified amount of money. A major implication of utilizing this strategy is that bands have to have a substantial cash flow in order to pay for the development. Given that mineral exploration and production is highly capital intensive, it means that substantial monies would be necessary and would have to be available to Indians prior to the actual development. Both Zakariya (1976) and Bankes (1983) point out that under this type of agreement, the band would have no internal control over the project, there would be minimal opportunities for Native people to gain employment or technical/administrative skills, and careful monitoring of the project would be required.

The benefits of such an arrangement would be that Indians would retain total ownership and jurisdiction over the natural resource. In addition, other firms would supply the technology and risk capital to explore, develop and

market the resources. Each of the development strategies discussed above incurs a cost. Hence, the type of agreement which an Indian group might wish to make is ultimately determined by the group's goals. For example, if the Native group wanted to maintain a subsistence way of life, as did the Cree of James Bay, and still allow development of natural resources, the concession type of agreement might be appropriate. On the other hand, if they wanted to become involved in the project, the joint venture would best suit their needs. For example, a joint venture called Shehtah Drilling was formed between Imperial Oil (50%) and the Dene (25%) and Metis (25%) Development Corporations in 1983 to conduct drilling and to service rig operations in the North West Territories.¹⁶

In cases where "successful" agreements have been made to develop reserve natural resources, what do Indians do with their windfall income? While the number of cases is very small, the Hobbema Reserve in Alberta is one example. The Samson Band's energy revenue was in excess of \$60 million for the 1979-80 year. Besides appropriating one-half to individual Band members, the Band built, and now operates, a 283 hectare feed lot. In addition, the Band has a sizable herd of cattle (recently selling one thousand head to Korea) and a 3,235 hectare grain operation. But the Band has made investments beyond the agricultural domain. In July 1981, the Samson business manager bought the charter of the Edmonton Canadian Insurance Company (and insurance related assets) for slightly more than one million dollars. Other Samson Band investments now include: rental properties in Edmonton, land and shares for subdivision in three different nearby towns, shares in a Vancouver condominium project, and shares in a housing development in Cold Lake, Alberta. Other oil rich bands are also investing in land purchases, housing projects, banks, and in one case, trying to work out a deal with a consortium which is seeking a national pay-television license.

Conclusion

Indian people are interested in developing their natural resource potential. However, as already pointed out, provincial/federal regulations make such development difficult in Provinces such as Quebec and British Columbia. Even in Provinces like Alberta (where Indians receive 100 percent of the revenue), changes in regulations have been implemented to retard natural resource development on reserves. For example, since 1981 the Alberta government has excluded Indian reserves from a provincial exploration incentive program. The provincial government is cancelling their subsidies to oil companies on reserves. These incentives (established in 1974) had been recently increased to cover about 35 percent of the cost of drilling and other exploratory work. Indians estimate that they will lose about \$36 million because of a drop in the sale of exploration permits.

Notwithstanding the above, Indian people have three major problems which confront them in trying to make a decision as to whether or not to develop their natural resources. First of all, these resources are non-renewable, and thus are a "one shot" event. This may be the only marketable resource that the Band has,

and once it is depleted, there is nothing else.

A second concern for Indian people is the impact of the development - both short and long term - on their communities.

There is increasing evidence and awareness of environmental damage, pollution and disruption of Indian ways of life by industrial activities and recent major resource development projects (D.I.A.N.D., 35)

The effects include an impact in rate and nature of cultural change, for example, a change to a wage economy from a subsistence economy, the forcing of Indians to relocate (both individuals and communities), the disruption of fish and game populations and, in some cases, the creation of serious health hazards. The federal government has identified 20 Indian communities (involving 10,000 people) as facing impacts from industrial development. In addition, the government has identified an additional 22 areas in Canada where "industrial development" may have serious and irreversible impacts on Indians and their communities, including the Dempster Lateral pipeline in the north which will have an impact on caribou, the Kildan oil field in northern British Columbia which has a potential hydrogen sulphide pollution problem, and a potential mercury pollution problem which may develop for Indians on the Labrador and Quebec coast.

A third concern relates to the view that Indians have of their reserve communities. Reserves are viewed by many Indians as their "homeland." As Pendley and Kolstad point out,

. . . it is impossible to separate tribal attitudes and actions related to their homelands. To tribal members these are part and parcel of the same thing (1980:235).

Once the development occurs the residents must live with the consequences.

An overarching concern of Native people has been how to negotiate agreements with private enterprise for the development of their natural resources. There is a great deal of suspicion on the part of Indians when dealing with private enterprise, and a feeling often exists that the government cannot be trusted to act on their behalf. Hence, Indians themselves must obtain expertise in the area of natural resource development in order to insure that they receive the best deal, and are aware of the impact of the development.

The above concerns, plus others, have forced Indians to be cautious when making decisions about natural resource development. It is an "ethos" that neither government nor private enterprise have taken into consideration when approaching Indian peoples. As Fudge (1983) points out, Indians are conservative to strategic outlook, emphasizing loss avoidance rather than risk taking. Indian community leaders are, therefore, often caught in a dilemma. On the one hand they are urged by local residents to assert a public desire for change, and yet at the same time they are cautioned to express an intense scepticism about

any Specific proposal to achieve change.

NOTES

1. The Final Report of the American Indian Policy Review Commission, 1977, was conducted in the U.S.A., while the Indian Minerals Directorate (i 981) in Canada carried out a minerals inventory.
2. We distinguish between the two terms "economic growth" and "economic development." Economic growth is a term used to refer to an increase in the productive capacity of the economy of a region or community. By economic development we mean a change in the "structure" of an economy, for example, less reliance on primary extractive activities (See Rea, 1976).
3. Proprietary (land) rights can vary from the simple (absolute for both surface and sub-surface) to legislative rights. This latter right would give Indians the right to regulate matters pertaining to the land. The actual type of proprietary right to be held by Indians will vary according to what Indians want to do with the land.
4. Other reserves have specific resources that can be used to promote economic development and generate income for Indians. For example, in Alberta, the Peigan Band has recently completed negotiations with the Provincial government over water rights. In return for the willingness of the band to give access to irrigation head works and water on the reserve to the Province, they received a cash settlement of over four million dollars.
5. Munro (1981) pointed out that the government's fiscal plan for 1985-86 called for an allocation of nearly \$345 million to support economic development of Native people.
6. Pendley and Kolstad (1980) show that in 1976 about one quarter of the total United States uranium production and 11 percent of the world production came from tribal lands.
7. The Department of Indian Affairs and Northern Development is in the process of developing legislation for increased self government for Canada's status Indians (see for example the Penner Report, 1983). However, this proposed change does not follow the model set forth in the U.S.A. (the 1934 Indian Reorganization Act). This Act allowed for the establishment of reservation governments based upon tribal constitutions. While there may be some similarities between the proposed Canadian Legislation and the IRA in the U.S.A., Indians there have the inherent right of "limited internal sovereignty." As Werhan (1978) points out, the United States government recognizes, but does not create, the power of Indian self government. In

Canada, the new proposal would shift ministerial administrative authority to the Indian Band. Legislative authority would be given to individual bands, for example, authority over land management, financial affairs, health, and the creation of a Band constitution.

The above changes have heightened the desire of Indians to control the developments now impinging upon their lands and culture. Because of the continuing energy crisis, and the insistence of the Canadian government on becoming energy self-sufficient, development of the traditional fossil fuels, such as coal, oil and gas, as well as uranium, will become important.

8. The decision may be made at a general Band Council meeting, a special meeting, or by referendum.
9. The minister may, with the approval of the Band Council, change the royalties payable. Much of the following technical data is based upon personal communications with the Indian Minerals Directorate, 1981 and the Surveyor General, 1981.
10. Indian Oil and Gas Act, 1974, Canada Gazette, Part II, Vol. 1,2 pp. 261-263; Indian Oil and Gas Regulations, Ch. 963, 1978 Amendments to the Indian Oil and Gas Regulations, C.R.C. Ch. 963, 1981 Indian Mining Regulations, P.C. 1968-1865, The Canada Gazette, Part II, Vol. 102,79 1968.
11. The interest on Indian monies held in the Consolidated Revenue fund varies over time but is set by the Governor in Council.
12. Other industrial activities on Indian land include a producing gypsum mine on the Six Nation Indian Reserve (Ontario) and negotiations for a coal development with the Blackfoot (Alberta).
13. The mineral resources listed below in the four categories have been identified on Indian reserve lands in the seven national regions.
 METALS: Copper, gold, iron, lead, magnesium, magnetite, nickel, platinum group, silver, tungsten, uranium, zinc
 NON-METALS: Asbestos, coal diatomite, feldspar graphite, gypsum, helium, jade, lignite, limestone, manganese, marl, obsidian, peat, perlite, potash, quartzite, salt, silica, silica sand, sodium carbonate, talc
 STRUCTURAL MATERIALS: clay, sand & gravel, shale, slate, stone, lime, dolomite
 OIL & GAS: bitumen, crude petroleum, natural gas.
14. The evaluation of each mineral has been based on a numerical rating of one to ten as follows:
 - = mineral potential unknown

- 0 = no mineral potential
- 1,2 = poor mineral potential
- 3,4 = fair mineral potential
- 5 = moderate mineral potential
- 6,7 = good mineral potential
- 8,9 = excellent mineral potential
- 10 = ongoing production

15. The Indian and Eskimo Affairs Program (Economic Development) has given the following figures for metallic mineral resource potential in 1974 dollars: B.C., \$324 million; Alberta, \$170m; Saskatchewan, \$418m; Manitoba, \$203m; Ontario, \$2,406m; Quebec, \$112m; and Atlantic provinces, \$34m. No criteria were provided as to how these values were obtained.
16. The joint venture contract is worth \$5 million. The majority of Sbehtah drill-crews are made up of skilled native Northerners. For further information on this subject see Arctic Petroleum Operators' Association Review, Volume 6, Number 3, Winter 1983/84, Calgary, Alberta.

REFERENCES

Aberle, David

- 1970 A Plan for Navajo Economic Development in *American Indians: Facts and Future, Toward Economic Development for Native American Communities*, Joint Economic Committee, New York: Arno Press.

Asante, S.

- 1979 Restructuring Transnational Mineral Agreements, *American Journal of International Law* 73(3):335-371.

Bankes, N.

- 1983 Resource Leasing Options and the Settlement of Aboriginal Claims, Canadian Arctic Resources Committee, Ottawa, Ontario.

Canada, Government

- 1983 The Report of the House of Commons Special Committee on Indian Self-government, (The Penner Report), Ottawa, Minister of Supply and Services Canada.

Department of Indian and Northern Affairs

- 1980 Indian Conditions: A Survey, DIAND, Ottawa.

Fudge, S.

- 1983 Too Weak to Win, Too Strong to Lose: Indians and Indian Policy

in Canada, *B.C. Studies* 57:137-145.

Indian Minerals Directorate

- 1981 Personal Communication, Reserves and Trust Branch, DIAND, Ottawa.
- 1981 Minerals Inventory, Reserves and Trust Branch, Canada: Department of Indian Affairs and Northern Development, Ottawa.

Irwin, A.

- 1968 Management Policy for Indian Owned Minerals: Possible Application to Northern Resources, in *Proceedings of a Symposium on the Implications of Northern Mineral Resources Management for Human Development*, No. 5, Edmonton, Boreal Institute, University of Alberta.

Koovos, A. and E. Brown

- 1980 The Implications of the International Energy Markets for Indian Resources, *The Journal of Energy and Development* 5:252-257.

Munro, Honourable John C.

- 1981 Notes for Remarks by the Honourable John C. Munro, Minister of Indian Affairs and Northern Development, to the Standing Committee on Indian Affairs and Northern Development, Ottawa, December 1.

Pendley, K. and C. Kolstad

- 1980 American Indians and National Energy Policy, *The Journal of Energy and Development* 5: 221-251.

Rea, K.

- 1976 The Political Economy of Northern Development, 36, Science Council of Canada Background Study, Information Canada, Ottawa.

Stillwaggon, E.

- 1984 Native American Economic Studies: A Bibliographic Essay, *Sage Race Relations Abstracts* 9(1):1-16.

Surveyor General

- 1981 Personal Communication, Legal Surveys Division, Surveys and Mapping Branch, Energy, Mines and Resources, Ottawa.

Werhan, K.

- 1978 The Sovereignty of Indian Tribes: A Reaffirmation and Strengthening in the 1970's, *Notre Dame Lawyer* 54:20-36.

Zakariya, H.

1976 New Directions in the Search for and Development of Petroleum Resources in the Developing Countries, *Vanderbilt Journal of Transnational Law* 9:545-577.