University of Alberta

The Rise of Aboriginal Forestry: Changing Political, Legal and Social Landscapes of Mainstream Society

by

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Abstract

This thesis attempts to formulate the significance of an emerging movement in commercial forestry by First Nations across Canada from a comprehensive point of view, in which a forest-dependent Aboriginal community has been interrelated with mainstream society in Canada. The first half of this thesis discusses changes in mainstream society that have impacted Aboriginal communities on a profound level, such as the historical dynamics of Canada's resource-dependent economy, gradual acknowledgement of Aboriginal and treaty rights, and the growing environmental movement. Also, this thesis asserts that people who have close ties with the natural environment ("forest people") have a unique perspective of forests. Taking the Little Red River Cree Nation in northern Alberta as an example, the second half of this thesis discusses how this community has been vying with mainstream society in order to add their values to forest management planning processes, while utilizing their traditional forests.

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I am grateful to Dr. Richard Schneider for having had an interview about nature conservation issues happening in northern Alberta. Dr. Satoshi Ikeda gave me fascinating insights into the Canadian political economy on a worldwide level. Responsibility for any shortcomings, however, belongs to me.

My gratitude goes to my friends, "Cliff's students," for their support. Mark Nelson gave me an opportunity to make the first trip to the LRRCN when I had just arrived in Canada. Shirley Nelson helped me better understand the Canadian situation of forestry and forest science. Graham Statt gave me encouragement and useful advice in synthesizing ideas about legal issues of Aboriginal communities when I needed.

I would like to thank Clint Westman, Marni Amilault and Michelle Borowitz for stimulating ideas of studying cultural anthropology in the Canadian, particularly Albertan, Aboriginal situation. My special thanks go to Lois and Roy Hartling, who went over this thesis to correct grammar and style in a short time.

My gratitude goes to my family. It may sound paradoxical, but once I left my country, Japan, I began to feel closer my family ties with my father and mother, Younosuke and Mieko Hayashi. My wife, Yuki Hayashi, has been patient and assisted with my study in Canada for these three years.

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1. Introduction

How do we see changes happening in a specific "traditional" society? This has been a long-standing question in anthropology. The posing of this question immediately draws the following question as to what is the definition of "traditional". I do not intend to discuss the latter question in this thesis, but it should be kept in mind whenever we discuss issues associated with Aboriginal tradition and culture. This thesis deals with Cree, the largest Aboriginal group in Canada, dominating from the east side of Hudson and James Bays to northern Alberta. Since they have still continued traditional subsistence based on hunting and fishing, they appear very "traditional" people. On one hand, it is said that they have been keeping a close relationship to the land by showing the greatest respect for animals to hunt, and that through hunting and trapping in the forests, their tradition has been handed down from one generation to the next (e.g., Tanner 1979). On the other hand, however, looking at the present reality of Aboriginal people either in Indian reserves or urban areas, they are in a predicament, suffering from low income, alcoholism, drug addiction, high birth rates, lack of educational opportunities, and so forth. Although they continue hunting still in the northern hinterland, the generations who engage in hunting are tilted to the older ones. Are we seeing a vanishing culture because fewer people are continuing to hunt? Moreover, recently, more and more Canadian First Nations are beginning to get involved in the cash economy. For instance, the Meadow Lake First Nation in Saskatchewan is making good money by establishing a forest company named Norsask Forest Products, Ltd. (Anderson 1997), and an Inuvialuit related organisation is running a big business corporation including the Calgary-based Inuvialuit Petroleum Corporation (Wallace 2002). Have they renounced their tradition or were their traditional societies destroyed just because they entered into a business world? There is a view that a decline of hunting subsistence and the entering into a cash

economy are part of the elements that would prove the lapse of Aboriginal tradition. However, one who sticks to that view will fail to see the full social dynamics of Canadian Aboriginal people, by only regarding them as passive successors of a declining culture. Indeed, the Little Red River Cree Nation (LRRCN) in northern Alberta, which is the specific First Nation I deal with in this thesis, started commercial forestry within their forests (see Figure 1.1 on the next page). My standpoint is that their involvement in the cash economy is a new action in order to sustain their communities, community well-being, and their culture –an action which may eventually bring about a new social and cultural form in their communities. In other words, we should not miss their active role in cultural dynamism.

The extent of fieldwork that anthropologists do is limited in terms of time and space. They visit a certain place for a certain period of time. The place that an anthropologist goes is just a small piece of the world, and the duration of fieldwork is only a moment in light of the long history that the place has. Paying too much attention to the specific community could make one collect a lot of precious data, but at the same time, there is the possibility that one might think of that community as disconnected from other worlds, despite the holistic view that anthropologists are supposed to have. We can no longer think of our field (i.e., a certain study area) as a society "isolated from the external world and from one another" nor "people without history" (Wolf 1982:4).

I raise an example of the above-mentioned issue. Takashi Irimoto, a Japanese ecological anthropologist, carried out research in a Chipewyan community for 15 months during 1975 through 1976 (Irimoto 1981). The Chipewyan are famous for their mobility. For instance, they moved around huge tracts of land as large as 27,000 square kilometres during that period (Irimoto 1981:87). Irimoto's main objective was to survey their caribou hunting system, such as how they allocated their energy and time for subsistence, how they moved through Saskatchewan's forests in the attempt to kill game, and how

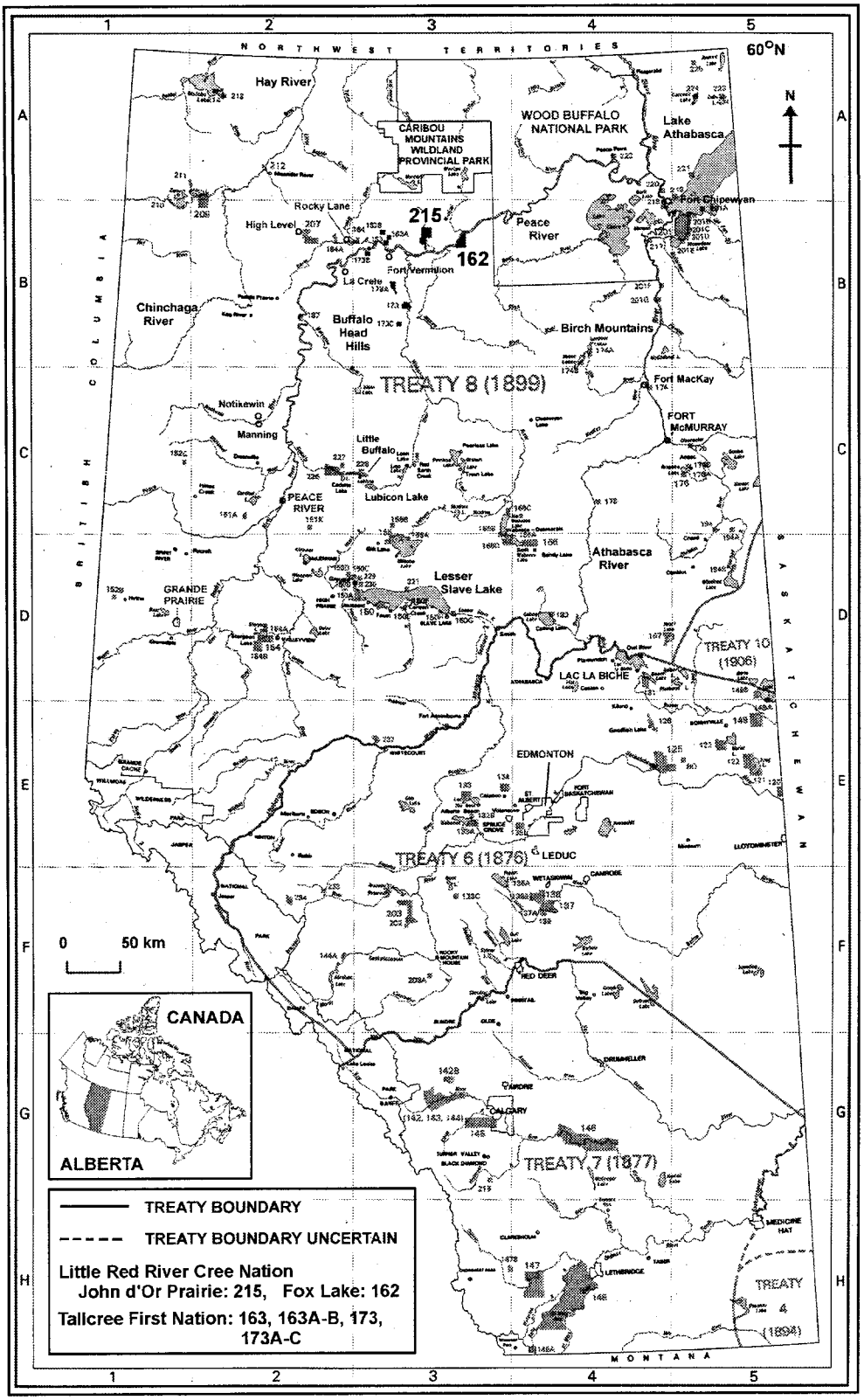

Figure 1.1. Alberta, showing place names and Indian Reserves mentioned in this thesis (based on Alberta Aboriginal Affairs and Northern Development 1996)

they organized their hunting groups. In the course of his fieldwork, he witnessed some events by chance, including some he thought could not happen among the Chipewyan. A Chipewyan young man, who was working for the government as a game management patroller in his village flew north to the tree line by a charted small airplane, and hunted a couple of caribou (Irimoto 1983:239-245). Moreover, he hid the killed caribou at some place near his village and went back to the village in the empty airplane. In traditional Chipewyan society, a hunter is supposed to share his harvest with community members, but he did not. Irimoto saw this as a sign of the erosion of traditional society due to the inroads of capitalist economy. My view here is not of "the people with a vanishing culture." I speculate that he might have confined the Chipewyan community to a static state by failing to consider the dynamics of their transforming society since European contact. I do not totally denounce him for his description of this event. His original intentions in his fieldwork were not to analyse the Chipewyan social transformation. In those days, many ecological anthropologists were devoted to the typology of hunter-gatherers' band organisations and their origins (e.g., Lee 1997). Therefore, since band organisation is closely associated with forms of hunting and gathering subsistence, whether or not their traditional subsistence was maintained was a critical issue for anthropologists.

This kind of pessimistic viewpoint is seen even in a book of the founder of anthropological fieldwork.

> Ethnology is in the sadly ludicrous, not to say tragic, position, that at the very moment when it begins to put its workshop in order, to forge its proper tools, to start ready for work on its appointed task, the material of its study melts away with hopeless rapidity. Just now, when the methods and aims of scientific field ethnology have taken shape, when men fully trained for the work have begun to travel into savage countries and study their inhabitants – these die away under our very eyes. [Malinowski 1978:XV]

One can detect his concern that an indigenous society has been destroyed due to forces from the external world. A certain society at a certain time is in the process of transformation in the long run. Whether the society is declining, thriving or being stable depends on the time span that an observer takes. At least, I believe that the above viewpoints will confine the people actually living there to a static, discrete state. Rather, I would like to see the Aboriginal people who are embarking on new commerce with the external world as those who are actively creating new strategies to survive by continuously negotiating for a better position in the world (Ota 1998).

In this sense, the discussion of Marshall Sahlins (1999) on a standpoint of anthropologists towards indigenous peoples is convincing. He says that indigenous peoples all over the world have actually survived the global dominance of Western culture (and capitalism) in the face of its destructive forces for indigenous societies. He continues that the Inuit are still there and still Inuit even though they became accustomed to modernity. For instance, these days the Inuit use rifles, snow-machines, CB radio and even aeroplanes for their subsistence purposes.

> What the self-consciousness of "culture" does signify is the demand of the peoples for their own space within the world cultural order. Rather than a refusal of the commodities and relations of the world-system, this more often means [...] a desire to indigenize them. The project is the indigenization of modernity. [Sahlins 1999:x]

Indigenous people such as hunting and gathering people are beginning to claim their own culture by harnessing modern technology to their lifestyle. Therefore, when I see Canadian Aboriginal society, I would like to bear in mind the following thing: to see their society from a broad point of view including Aboriginal and surrounding non-Aboriginal issues ranging from Aboriginal history and worldviews to Canada's social context.

This thesis deals with the significance of Aboriginal involvement with the forest

industry, taking LRRCN's forest management practices. Aboriginal issues associated with forests and forestry are dramatically changing these days on a national (Canadian) scale and an international one as well. Many of Canada's First Nations have become involved in commercial timber production. LRRCN is one of them. Rather than alienating itself, the LRRCN set about industrial forestry practices during the 1980s and later started management of their forest co-operatively with governments and the forestry sector (e.g., The National Aboriginal Forestry Association and the Institute on Governance 2000:63). Since more than eight hundred Aboriginal communities are located within Canada's productive forest, the presence of Aboriginal people in the forestry circle cannot be ignored any more in Canada (National Forest Strategy Coalition n.d.). This new social movement has been brought about by not only the Aboriginal side but also the external (non-Aboriginal) side. Therefore, Aboriginal issues associated with forests and forestry should be discussed from viewpoints of both the inside and the outside of Aboriginal society.

Especially, forest and forestry related issues require one to employ a broad point of view because of their complexity, which flows from the fact that the forest has a diverse range of functions. The forest purifies air and water, provides wildlife habitat, sequesters carbon, and protects the land against erosion. The forest provides not only environmental services, but also economic and social benefits. Forestry and other resource industries being carried out in the forest, such as oil and gas, minerals, and diamond mining, have become important sources of both Canada's provinces' and territories' revenues. Also, an increasing number of people have begun to appreciate the psychological well-being of being within the forest (Wallace and Shields 2001). Equally important, for First Nations, the forest has a spiritual value because the forest is fundamental to an Aboriginal way of life (e.g., Stevenson and Webb 2003). In this way, with different expectations, many stakeholders can derive different benefits from the

forest. These issues contribute to the complexity of forest and forestry issues. Therefore, problems of any part are included in that of the whole.

I would like to state my anecdotal (inside) stories in which I have ended up with the above-mentioned viewpoint. At first, the research question was different from one as stated above. LRRCN of northern Alberta is said to be one of the forerunners in co-operative forest management between the Aboriginal and non-Aboriginal sectors in Canada. While I planned research on the LRRCN forestry, they were expected to implement new forest management plans in order to diversify their economic strategies. I was supposed to document processes of how LRRCN would negotiate for new plans both inside and outside of the communities, and to discuss how they would work on social and cultural sustainability. However, chiefs were changed in the summer of 2003, agreements about new forestry strategies were not reached among the chief and councils until the late spring of 2004, and meetings in which to discuss forestry strategies among community members have not been held by the winter of 2005 because the hunting season set in. Therefore, I could not help but change the research question. Mercifully, however, I was able to take advantage of this situation. While preparing for fieldwork, I realized that here in Canada Aboriginal issues, including a notion of cultural sustainability and their relationships to the environment, are not just theoretical frameworks but also realistic ones. In Canada, anthropological theories are always challenged by the real world. Canadian students are always pressed to reconstruct anthropological frameworks in a way that would fit real socio-cultural events actually happening in everyday life. One can see court cases taking place between First Nations and forest companies on television, land claim issues are always on the news, and Aboriginal entrepreneurs have been in the newspapers. In the post-colonial period, when the people whose culture was once unilaterally described by anthropologists have begun to claim their own cultures, the definition of culture should continuously be

re-shaped, re-made, and re-generated. The discussion of the post-colonial situation is beyond the scope of this thesis, but it is worth considering.

When I recognized that I could not do fieldwork in the winter of 2005, I decided to discuss social situations that are making Aboriginal forestry possible from a broad point of view, synthesising my ideas based on the existing literature. Besides, I was able to utilize opportunities to interview people who are working for (or with) the LRRCN. As noted in Chapter 6, a couple of environmental groups are assisting the LRRCN's in creating new forest conservation strategies, and I interviewed Dr. Richard Schneider, who works in the vicinity of the city of Edmonton for the Canadian Parks and Wilderness Society (CPAWS), about a view of nature conservation in northern Alberta. I also interviewed Mr. Jim Webb, who is in charge of Corporate and Intergovernmental Affairs of the LRRCN and Tallcree First Nation, about the First Nations' decades of years of endeavour to diversify their economic strategies. This study was supported a lot by the LRRCN's engagement in the Sustainable Forest Management (SFM) Network at the University of Alberta. In order to better pursue ways of looking for sustainable use of forests within their traditional territories, the LRRCN joined the SFM Network around 1995. Mr. Webb is a key person to connect the First Nations' initiatives and a direction of research projects. Since he occasionally comes down to Edmonton to communicate with SFM Network stuff members, I was able to contact him. Incidentally, as preparation for fieldwork, I visited the LRRCN's reserve of John d'Or Prairie twice (12-15 June 2002 and 9-13 August 2005), and I used these experiences for writing this thesis.

I briefly would like to mention the idea of "traditional forestry" of Aboriginal peoples, which misled me about the nature of Aboriginal relations to forestry. As noted above, Aboriginal forestry is a new enterprise, at least in northern Alberta. Compared to Alberta, Aboriginal groups in British Columbia have a relatively long history of being

involved in commercial forestry. The development of the lumber history on the Northwest Coast was triggered by gold rushes during the second half of the 19th century (e.g., Innis 1956). Since then, many Aboriginal community members have worked as hand loggers for industrial forestry. Some Tsimshian community members were highly involved in hand logging and seasonal mill work and contributed to the expansion of the industry. The rise of the industrial economy was not a passive process in which Aboriginal groups simply acquiesced to the mainstream society (Menzies and Butler 2001). Rather, they have survived capitalist economy. However, because of the long-term alienation of Aboriginal land by the colonial state and the industrial capitalist firms, industrial forestry had altered the material connection between Aboriginal community members and forests. Therefore, it seems that even the Northwest Coast Aboriginal groups have not developed "traditional (commercial) forestry," which has been deeply rooted in their societies and contributed to the development of their culture.

Regarding Aboriginal forestry in Canada, I sometimes see such phrases as "Aboriginal people have been practising forestry since time immemorial [in an] ecocentric [manner]" (Parsons and Prest 2003:780). However, because of the above-noted process, it cannot reasonably be assumed that they have been "traditional foresters since time immemorial." To avoid confusion, I must mention that many Aboriginal groups have intimate knowledge of plants and trees (e.g., Marles et al. 2000; Turner 1998). Aboriginal worldviews are deeply rooted in traditional subsistence on the land; however, it is not clear that forestry as such, especially a commercial one, has been supporting their cultural values. At least LRRCN in northern Alberta have been hunters, trappers, fishers and gatherers; therefore, they were never foresters, even though it is a fact that they used trees at times. It is important to recognize the fact that LRRCN began commercial forestry as a quite new development in their history.

Accordingly, Canadian Aboriginal forestry cannot be thought of as being in some

way analogous to Japanese traditional forestry. In Japan, by the 17th century under the Tokugawa shogunal (a feudal) regime, lumber markets in urban areas were organized by entrepreneurs, both governmental and private, and the lumber industry was well developed within the country (Kato 1999). In the late 18th century, in order to prevent the exhaustion of forest resources, the Tokugawa shognate, in concert with regional barons, encouraged plantation siliviculture throughout Japan. Afforestation projects led to the development of forest management techniques, such as planting, growing, thinning, pruning and harvesting, and those techniques were incorporated into forest-dependent local communities (Totman 1989). The arts of forestry, tools, and practices reflected the diversity of localities. (Unfortunately, after WWII, Japan's forest policies were made uniform regardless of regional differences.) I should not jump to my conclusions, but I will say that the nature of Aboriginal forestry in Canada is different from this. Further scrutiny of archival and oral sources is needed to see how Aboriginal people in various parts of Canada have been involved in forestry labour. Unfortunately, with limits of time, this thesis does not cover this issue. This will be part of my future study interests.

Finally, in order to discuss Aboriginal forestry in a diverse way, I organize the chapters as follows. Particularly, I deal with Aboriginal peoples' relationship to natural resources and their engagement in nature, and influences from the external world when they engage in nature. In Chapter 2, I review the history of the Aboriginal relation to the Western societies in the light of resource exploitation, which starts from European contact. I show how their relationships have been changed during this long history. Chapter 3 deals with a shift in the interpretation of Aboriginal and treaty rights. Canadian Aboriginal people, and Australian Aborigines as well, have a special legal status because of treaties that were signed with the Crown. In Chapter 4, I discuss environmental movements that arose from Western societies, and how environmental awareness has moved into the political arena. A common thread running through these three chapters is

that issues have become contentious in every subject since the 1970s. This coincides with the time when Aboriginal use of natural resources began to be re-considered. The discussion of Chapter 5 contrasts with that of Chapter 4. Aboriginal use and perspectives of nature lie in different domains from Western thoughts. I mentioned above that Canadian Aboriginal peoples were never foresters, but at least some of them might have been what I call *forest people*. Forest people as used here means people modifying forests and having techniques and intimate knowledge to do so.

In the second part, I deal with LRRCN's forestry. In Chapter 6, I discuss the history of opening up northern Alberta by European settlers and industrial development, which caused the conversion of LRRCN's boreal forests. Then, I scrutinize forest management strategies carried out so far by LRRCN. Finally, in Chapter 7, I conclude my thought on Aboriginal forestry in Canada and make a couple of comments regarding LRRCN forest management plans.

2. Aboriginal People in Canada and Natural Resources

2.1 Introduction

The relationship between Canadian Aboriginal peoples and non-Aboriginal (Euro-Canadian) societies has historically involved interests from natural resource exploitation. This fact is well reflected in various temporal phases in its history ranging from the fur trade, starting in the early 17th century, to recent disputes of logging, mining, and oil and gas development in the north. Because of the nature of this relationship, we need to review the historical dynamics of Canada's economic trends on a large scale and its impacts on Aboriginal societies.

First of all, with its abundant natural resources, Canada's economy has been always driven by export of raw, or relatively unprocessed, resources – what are called *staples* (Wallace 2002:9). Canada embarked on transatlantic trade in the 17th century, and from the outset Canada was an exporter of staple products, such as fish and fur to her mother countries Great Britain and France, and gradually switched to south of the border, to the United States. In this sense, from a modern world-system point of view, Canada has always been a *periphery* country, which supplies raw materials for industrial *core* countries (presumably transforming to *semi-periphery* later on) (e.g., Hopkins 1982:11). Behind the economic development of Canada, there has been always the presence of Aboriginal peoples negotiating with Europeans (or Euro-Canadians). Second, because of the nature of resource exploitation taking place on huge tracts of the land, large centralised political machinery has been needed in order to solve financial burdens. During the initial phase of the fur trade era, the Hudson's Bay Company (HBC) served this role, and the Dominion Government of British North America was the backer for the growing needs of the industry sector in the 19th century. This kind of machinery eventually served to promote the colonization of Canada on a large scale, excluding many of the Aboriginal groups from the

mainstream societies. Therefore, in order to discuss a historical Aboriginal relationship to Euro-Canadians, Canada's staples-based economy and the nature of the opening of Canada's land promoted by large centralised machinery such as government should be taken into account.

I divide the history starting from the 17th century into three phases from an Aboriginal point of view: 1) the collaboration era; 17th century to 1870, 2) the exclusion era; 1870 to 1975, and 3) the co-existence era; 1975 onward. The following sections are composed based on this classification.

2.2 The Collaboration Era (the 17th century to 1870)

2.2.1 The Fur Trade as a Forerunner of the Staples Economy

In the early days of European settlement in the northern half of North America, the new environment was so severe for settlers that the death rate of the population was very high. Survivors needed to adapt to a harsh environment by borrowing knowledge and techniques from Aboriginal peoples of northern North America, which could improve the current living conditions (Innis 1995a). Also, in order to maintain the same standard of living as the one to which they had been accustomed, migrants could not help but depend on goods produced in their home European countries, obtained only by the transatlantic trade. Fortunately, natural resource products were easy to secure on a large scale in the New World and were sold at good prices in the home market. These products became important items for migrants to trade for European goods. The Atlantic Ocean was teeming with fish such as cod, and the cod fishery started in the Gulf of St. Lawrence and off the coast of Newfoundland. The fishery did not entail a close relationship to Aboriginal populations (Dickason 2002:73-75). In the maritime fisheries, Europeans and Aboriginal communities were engaging in their own lifestyles, separately. However, it was very

different for the fur obtained in the Canadian Shield in large numbers. In Europe felt hats made of the under-fur of beaver pelts had been favoured very much, so that in some areas the beaver was nearly exterminated by the end of the 16th century (Ray 1996:54). Moreover, habitants of the New World were better at trapping fur-bearers than European settlers. Soon, Europeans started trading in fur with Aboriginal groups on a commercial basis, which brought about closer contact between them. The winter weather was severe, but the fur obtained during the winter was highly valued in the mother countries. Also, the fact that beaver was abundant in the interior boreal forest encouraged European traders to go further into the inland of the Shield. They extended a travelling line along rivers and creeks and built many trading posts in the inland. Traders prompted Aboriginal hunters and trappers to bring fur to them, and in return, the Aboriginal hunters gained European products such as knives and firearms. Supply of European goods made it easier for Aboriginal hunters to kill game animals, and they gradually became dependent on European goods to some extent. Between the 17th and 18th centuries, many trading posts were built in various parts of the northern half of North America. A trading network, which was initially established around the St. Lawrence and the Ottawa rivers area, was gradually extended westerly to Lake Winnipeg, to the Churchill, to the Mackenzie and Peace rivers, and finally, in 1793, reached the Pacific coast (Innis 1995a).

The extension of a trading network was the result of Aboriginal collaboration because they had intimate knowledge of surviving severe environments in boreal forests and techniques of travelling through webs of rivers. Without Aboriginal technology such as Indian canoes, Indian corn, and the arts of making pemmican, Europeans could not have penetrated Canada's vast land. This collaboration was economic in origin, and the production of fur was a means to achieve common interests of both sides (Francis and Morantz 1983:167-171). Because of the nature of barter, the Aboriginal side had been trying to manoeuvre the trade practice to their own advantage. Terms and conditions of the

trade seesawed, each time an economic equation changed. On the other hand, the fur traders' side wanted more fur at the lowest prices possible. From time to time, traders made alliances with Aboriginal groups, so that they could reach further Aboriginal communities, bypassing closer Aboriginal fur brokers (Ray 1996:54-59).

In this way, the fur trade was built on an economic basis; Friesen (1999) suggests a unique idea from an Aboriginal point of view, saying that Aboriginal groups regarded the fur trade as not only economic exchange but also entailing social, diplomatic, military exchanges. Aboriginal groups at that time were not always on good terms with each other. In order to assure economic security, they often made alliances with other tribes and helped each other during hard times. These Aboriginal alliances were not infinite, and they were annually renewable, reflecting changeable social situations. Friesen insists that the fur trade was instituted because the fur traders' annual round coincided with the form of Aboriginal alliances. In those days, allied tribes used to exchange gifts with each other. The gift was supposed to carry with it the personality of the giver, and the act of gift exchange served to impose a sense of obligation on each other, in which the parties involved should give and reciprocate what one has received (Kaplan 1997). Indeed, Euro-traders gave presents to Aboriginal hunters in order to encourage the trade and discourage the hunters from bringing their trade to other posts (Francis and Morantz 1983:167-171). Aboriginal peoples might have equated this trader's act with the gift exchange that they had been used to.

All in all, everything was done through negotiation. The mutual dependency between two different peoples was a complicated form of collaboration, in which various expectations of both parties had been brought together.

2.2.2 Governmental Intervention in the National Economy

The history of the fur trade is that of contact between two starkly different

civilisations and cultures (Innis 1995a). European goods improved Aboriginal subsistence such as hunting and trapping; however, excess hunting also caused a decrease of the fur-bearers in more accessible areas. A decline of animal resources required traders to proceed more westerly and further inland and to search for new Aboriginal groups wanting a supply of European goods.

A round trip to the inland was costly. Later on, Indian birch canoes were replaced by York boats, which could carry more cargo, but they were too heavy to portage (Ray 1996:94-104). Prior to the steam- and railway era, this labour-intensive transportation not only limited the amount of cargoes but also cost traders huge budgets (Ray 1996:268-275). It was the Hudson's Bay Company (HBC) that covered the increasing overhead costs of round trips to the inland and supported capital investment in the maintenance of trading and marketing networks across the continent. The HBC was established by obtaining the Royal Charter of 1670, which Charles II endowed a "title" to Rupert's Land, a vast area draining into Hudson Bay. This well illustrated how indispensable large financial support and the security of the control over the land were. Another example is that Montréal-based fur traders called Nor'Westers (Northwesters) rallied to establish the North West Company (NWC) in 1779. These entrepreneurs would muster financial support, equipment, and the manpower (Ray 1996:94-104). This was not the end. Further extension of the trading lines required more transportation costs, and finally, traders' financial needs led to the amalgamation of HBC and NWC in 1821 (Innis 1995a).

By then, however, fur was no longer an important staple. The rise of the lumber industry eclipsed the significance of fur. A fur-trading route became a base of a trading network of the lumber industry. The bulky nature of lumber stimulated industrialism in the St. Lawrence and Ottawa axis area because the construction and the improvement of canals were needed to lower transportation costs (Innis 1995b). The Dominion government served to meet the demands from traders and settlers. Then, the next staples were

agricultural products such as wheat grown in prairie settlements. Agricultural products also needed efficient long-haul transportation. By the middle of the 19th century, the building of railroads started around the Great Lakes area, which also offset the disadvantage of water transportation. The longer the distance to haul commodity products became, the more the Dominion government had to be involved to offer financial supports for the trade. Under this centralised government, Canada came under the sweep of the Industrial Revolution at a much faster pace than the United States did (Innis 1995a). In the course of industrialization, various staples became important and then less so. After the decline of the lumber industry, the pulp and paper industry followed. The next were gold and minerals. In this way, as trade developed, the governmental machinery became larger and more centralised at a faster pace. Finally, the opening of western Canada was to be undertaken in the latter part of the 19th century under this large centralised government at one stroke, which I discuss in the next section. Ironically, it was the fur trade that provided the scaffoldings for this trend of economic development and the centralized governmental body.

2.3 The Exclusion Era; 1870 to 1975

2.3.1 Aboriginal Groups Excluded from Confederation

The Dominion of Canada came into existence through Confederation in 1867. It is no exaggeration to state that Canada's boundary was determined by the extent of the network of the fur trade with Aboriginal people (Innis 1995a). Unfortunately, they were no longer considered as partners worthy of inclusion into the institution of the government, rather they were seen as a nuisance or impediment.

The second half of the 19th century was the century of expansion of the nation, of exploitation of natural resources, and of the proceeding of White settlement. Canada,

originally consisting of Canada West (Ontario; with the Act of Union of 1840, "Upper Canada" became "Canada West" [Dickason 2002: 209]), Québec, Nova Scotia, and New Brunswick, set about expanding its geographical entity. The Hudson's Bay Company surrendered the charter of Rupert's Land, and the Dominion government assumed jurisdiction over it and the North-West Territories (spelled *Northwest* after 1905) in 1870 (Dickason 2002: 237; 257). In the same year, the prairie province of Manitoba was created from the North-West Territories. Consequently, an increasing number of speculators and settlers were penetrating into the prairies, seeking new sources of natural resources and markets for eastern goods. Moreover, a series of gold rushes in British Columbia (including the discovery of gold deposits in 1858) attracted gold miners' attention to the Pacific coast from both Canada and the United States. In order to secure the settlers' economy prior to full-scale frontier development, the Dominion government urged the construction of a transcontinental railway that would connect eastern Canada with the west coast of the continent. Indeed, by doing so, the government desired to have more immigrants to the west and thereby foster domestic industries (Kimura 1997).

2.3.2 The Beginning of the Treaty-Making Process (The Numbered Treaties)

However, the west was an area where numerous Aboriginal peoples lived. In order to avoid conflicts between settlers and Aboriginal groups, land title needed to be settled over the North-West Territories. To accomplish this end, the government set about making treaties to frame the legal infrastructure regarding land use. The reason why I focus on this here and the next section is that it is Aboriginal treaties (commonly called the *Indian treaties*) that make a difference to Canadian Aboriginal peoples, compared to many other indigenous peoples all over the world who do not have treaties with national governments. (For instance, the Ainu, the indigenous people in northern Japan, have come under assimilation for a hundred years; however, they do not have any treaties with government.

It is not until 1997 that the law which is aimed to sustain and promote their culture was issued.)

The treaty making was nothing new for both Aboriginal peoples and the Crown (i.e., the government). They had had more than a hundred years' of its history by then. Aboriginal treaties in Canada can be divided into four categories in historical order:

1) Peace treaties mainly in the Maritimes during the 18th century (the "named treaties");
2) Simple land cession treaties in Upper Canada (called Canada West later, now Ontario) in the late 18th and the early 19th centuries;
3) Robinson Treaties and what are called the numbered treaties such as Treaties Number One to Eleven, where large tracts of land were ceded or surrendered for cash payment, annuities, reserves, game rights and other benefits;
4) Modern comprehensive land claim agreements that are especially complex with governmental social and economic guarantees as well as large tracts of land (Dempsey 2004).

The category associated with the period of this section is the third. The third period started in 1850 with the Robinson treaties and, through the period of Treaties One to Eleven, ended in 1923 with Williams treaties. Between 1923 and 1975, with the first comprehensive agreement (the James Bay and Northern Québec Agreement), no further treaty was made. The treaties signed during the third period cover western Canada except most of British Columbia.

The Indian treaties have their origin in the Royal Proclamation of 1763. The Proclamation was made in order for the British Crown to forbid settlers from entering into land negotiations with Aboriginal groups in the colonial era and to reserve to itself the exclusive right to negotiate cessions of Aboriginal title to the land. The Royal Proclamation of 1763 had designated four principles when the Crown (governments)

negotiated for the land with Aboriginal peoples. That is, 1) Aboriginal people can only surrender or cede lands to the Crown, 2) only the Crown can accept their surrender or ceding, 3) negotiations have to be done in public meetings, and 4) the meetings were to be set up only for the above purpose. Canada was part of the British Empire, and the government had to follow the treaty-making procedure that the 1763 Proclamation stipulated.

Particularly as for treaties made in the third period, situations that faced Canada during the latter part of the 19th century urged the government to start making treaties with Aboriginal peoples. First, Canada was seeing the United States conducting military campaigns against Aboriginal groups south of the border. The Dominion government feared that the frontier wars that took place in the United States might go across the border and expand into the western Prairies (Dickason 2002:260). Second, the newborn government of Canada had neither a standing army nor enough funds to afford these kinds of military campaigns. Land title settlements had to be done with as little trouble and as little cost as possible. Third, Canada believed that it was morally superior to the United States and could deal with Aboriginal people on a peaceful basis, as opposed to a violent one (Dempsey 2004).

2.3.3 The Robinson Treaties

The Robinson treaties were important in that they became the basis for the following numbered treaties both in content and in format. The Robinson treaties refer to two treaties signed in 1850 between the Ontario government and Ojibwa on the north sides of Lakes Huron and Superior (the Robinson-Huron and the Robinson-Superior treaties). The main objective of these treaties was to extinguish title of the Ojibwa to the land. By doing so, the Ontario government intended to proceed to test for mineral deposits under the ground and search out timber inventory. Thus, it is clear that growing needs of natural

resource exploitation by settlers started the treaty-making processes.

The Robinson treaties have two noticeable features. First, in compliance with the principles of the Royal Proclamation of 1763, public meetings were held by the provincial government in order to negotiate for the lands with the Ojibwa. Second, the government added new aspects to the nature of the treaties: 1) the concerned Ojibwa groups were to be granted reserve lands in return for land *surrendered*, 2) cash payment and annuities were to be paid for both the Huron and the Superior groups, 3) Aboriginal groups were to be guaranteed to retain rights to hunt and fish on the ceded lands, except for those portions that would be sold to private individuals or set aside by the government for specific uses (Dickason 2002:233). Thus, these concepts of land surrender and guaranteed hunting rights became a very important framework for the later numbered treaties.

2.3.4 The Numbered Treaties

A series of treaty-making negotiations were triggered by the expansion of the *natural resource frontier*. Starting with Treaties Number One and Two in 1871, the government signed seven treaties with the "Prairie Indians" in succession. Treaties One to Four and Seven were made in order for government to acquire a right-of-way for the transcontinental railroad (Dickason 2002:257-261). Having persuaded British Columbia to join Confederation in 1873 on the basis that the transcontinental railroads would be extended there, the federal government opened up the southern part of the prairie at one stroke, through which the railroad would run. Once the east and the west sides of the continent were tied up through the southern prairie, the government became reluctant to commit itself in Aboriginal affairs in the northern part of the North-West Territories. The discovery of gold in the Klondike in 1896, however, prompted the government to prepare the next treaty. Finally, Treaty Eight was signed in 1899 with the "Woodland Indians" living there. Treaty Eight, of which the Little Red River Cree Nation is one of the

signatories, covers the enormous Athabasca-Mackenzie district with the boreal forests, ranging from the northwest of Saskatchewan, to the northern half of Alberta, and to the northeastern portion of British Columbia and the Northwest Territories south of Great Slave Lake. In this way, by 1921, the Dominion government created eleven numbered treaties with Aboriginal peoples in the Northwest Territories.

With the treaties, the government believed that it had cleared Aboriginal land title. The phrase reiterated in the numbered treaties including Treaty Eight was:

> the said Indians DO HEREBY CEDE, RELEASE, SURRENDER AND YIELD UP to the Government of the Dominion of Canada, for Her Majesty the Queen and Her successors for ever, all their rights, titles and privileges whatsoever, to the lands included within the following limits [...]. [Treaty Eight]

In return, the government offered specific reserve lands on which the First Nations could settle exclusively, various guarantees and obligations, which included agricultural implements, ammunition and twine, annual payment, clothing for chiefs, a right to hunt, fish and trap on unoccupied Crown land, and the provision of education and health care services.

As is the case of each treaty, Treaty Eight has profoundly unique clauses in it. Unlike eastern Prairie Indians, whose bands were made up of hundreds of families, Woodland Indians were living in smaller units made up of only a few families. They were rather nomadic and preferred bush life by engaging in hunting and trapping. Then, on one hand, like previous numbered treaties, the government offered reserve lands for those who decided to start farming and cultivation. On the other hand, those who wanted to continue a traditional way of life based on hunting and trapping in the bush were offered land in severalty.

2.3.5 Different Expectations

The reason why Aboriginal groups in the North-West Territories signed these treaties was that they hoped to continue their traditional lifestyle as they had done. A massive influx of Euro-Canadians into the Aboriginal territories resulted in harsh competition between both parties for resources such as wood, animals, water, and so forth. On the prairies, buffalo hunting was getting difficult to continue because of development and exploitation of natural resources by settlers. Railroads in the United States hindered buffalo from migrating into Canada. To make matters worse, the use of repeating rifles caused excess hunting, and Aboriginal hunters suffered a decrease in animal populations. Particularly, the winter of 1879–80 was a bad winter and brought about severe famine to prairie Aboriginal communities (Dempsey 2004). In the northwestern woodlands, Aboriginal groups were suffering from a deterioration of the forest ecosystem caused by trespass and intrusion of frontiersmen on the Aboriginal hunting grounds. Also, White trappers came into conflict with Aboriginal trappers, and social conflicts occurred, so that the North-West Mounted Police (NWMP) decided to patrol there during the winter trapping season (Madill 1986). To make matters worse, since the HBC had surrendered its charter to Rupert's Land in 1870, Aboriginal groups could no longer rely on the Company's social services. Therefore, Aboriginal communities, in the prairie and the woodland, could not ignore changes coming steadily to their life.

As noted above, Aboriginal peoples believed that the making of treaty with Euro-Canadians was proof of the establishment of a reciprocal relationship, where they would be obligated to support each other on equal terms. They hoped that signing treaties would protect their way of life. Indeed, some Aboriginal groups such as Treaty Six groups asked the government for treaties. Although they did not favour treaties as such, there was little choice to save them from destitution.

However, what were negotiated in Robinson treaties and the numbered treaties

were totally different from what Aboriginal peoples were used to. To begin with, the primary governmental intention was to *extinguish* land title of Aboriginal peoples and, in return, to provide treaty protection (the guarantee of hunting, fishing and trapping rights and so forth) to appease them (Madill 1986). With this intention, treaty-making processes were far from the bargaining situations that Aboriginal people were used to in the fur trade. The government took a take-it-or-leave-it attitude during treaty negotiations (Dickason 2002).

The fundamental problem is that they did not have a concept of property as Westerners did. A concept of land surrender was incompatible with Aboriginal worldviews. It can be argued that they were not provided enough information regarding the concepts of land surrender and reserve lands during the treaty negotiations. Therefore, it is hard to say that Aboriginal people were able to understand fully the implications of the legal terminology. Moreover, it is dubious whether European legal terminology could properly be translated into Aboriginal languages, such as Ojibwa, Cree, Sioux, Chipewyan, and Blackfoot (e.g., Morris 1991).

All in all, treaties were not so much for the Aboriginal peoples as for the government and settlers. There were different expectations about the nature and the scope of treaties between both parties. Aboriginal groups thought of the act of signing treaties as the beginning of mutual obligations as they did in the fur trade, and, for them, the land surrender was just the opening phase of the treaties. On the contrary, taking a narrow view, the government regarded making treaties as just a once-and-for-all way of extinguishing the Aboriginal peoples' land titles. With treaties, the government gained a legal basis for frontier development. In the end, many Aboriginal people were disempowered by treaties and gradually confined onto Indian reserves since then.

2.4 The Transition Era; 1975 Onward

Can the Aboriginal and government parties restore the lost trust? The present time is the era to test its possibilities. The 1970s saw a sign of changes in the position of Aboriginal peoples within Canadian societies, which had been shackled by a century-long "internal colonialism" of federal policies (Wallace 2002:232). Natural resource exploitation once gave governments a hundred years ago their motivation to set up Indian Reserves, to which Aboriginal peoples were to be confined, but resource development during the 1970s forced governments to draw up a modern type of treaty and comprehensive land claim documents with considerable amounts of compensation to Aboriginal communities in areas where no treaty had been made.

The transition was ushered in by the James Bay and Northern Québec Agreement (JBNQA), which was signed in 1975 between the James Bay Cree and the Inuit of arctic Québec and the Québec government. In 1971, the Québec government launched a hydro project to redirect the La Grande River waterways and build a gigantic system of hydroelectric dams. *James Bay I* (as often said to contrast with later hydro projects such as the one for the Great Whale River waterway, which was shelved in 1994) was announced without any consultation with the Cree and the Inuit who would be affected. If completed, the dam would flood a vast tract of 9,600 square kilometres, and it was clear that this would cause serious damage to the subsistence-based Aboriginal communities. This time, Aboriginal groups' reactions were different from those in treaty negotiation processes of the previous century. Immediately the two groups established the Inuit Tapirisat of Canada and the Grand Council of the Cree, separately. They developed public demonstrations to halt the hydro project on a large scale, and their claims were widely reported in newspapers, on radio and television (Dickason 2002:397). Realising that they must negotiate a better situation rather than simply oppose this development, the Cree and Inuit reached an

agreement. In this agreement, the Cree and Inuit obtained the affirmation of specific rights and compensation in return for surrender of other rights and their land claim. There have arisen many problems with the agreement since then, but the rights and compensation that the Cree gained are considerable. (For example, Aboriginal populations received $ 232.5 million in compensation from the Québec government and maintained ownership of approximately 5,500 square kilometres on Category 1A land with exclusive surface rights. However, Category 2 lands, amounting to approximately 62,000 square kilometres, belong to the province although Aboriginal populations maintained exclusive rights to hunt, fish, and trap on it. Category 3 lands were surrendered by the Cree to the government [Dickason 2002:397-398].) In addition, the government created programs for hunter income support, environmental protection and wildlife management, and Cree-oriented education. Also, an economic development corporation was established in order to facilitate capital investment for Aboriginal groups, such as a Cree Regional Authority, to represent local Aboriginal peoples' voices.

Resource development since the 1970s has been characterised by megaprojects. Particularly, since provinces have the ownership of natural resources within their respective boundaries, they are eager to raise revenue coming from resource development. Even the federal government in the early 1980s instituted the National Energy Program (NEP) and promoted exploration of oil and gas in the Arctic and Atlantic offshore energy frontier (although NEP was short-lived). Since most of Canada's resources are located in the hinterland (where many Aboriginal communities are located), their development inevitably involves large-scale construction (Wallace 2002:160-162). Accordingly, every time a megaproject is launched, subsistence-based Aboriginal communities are put at risk. This pattern of resource development grew to become a pattern, where the resource sectors and government and the Aboriginal communities sit down and talk about trade-offs between economic benefits and social and environmental damage that projects would bring

to the local communities concerned. Since the JBNQA, modern comprehensive land claim settlements began to be negotiated in areas where no treaties have been signed. The JBNQA became a precedent for these comprehensive claims.

For instance, the Inuvialuit communities of the Mackenzie River Delta reached an agreement (the Western Arctic Claim Agreement [or the Inuvialuit Final Agreement]) after lengthy negotiations in 1984. Their land claim arose from concerns about environment impacts of development at the Beaufort Sea area, where oil and gas deposits were discovered. This agreement was the first significant land claim case under a new federal land claims policy established in 1973 (Matthiasson 1995). As another example, in 1992 the Tungavik Federation of Nunavut signed the final central and eastern Arctic agreement between the Inuit and the federal government, and this agreement provided an impetus for the creation of Nunavut Territory, which was realized in 1999 (Ray 1996:349-350). However, the comprehensive claim process has not always gone smoothly. The federal government's rejection of the Dene/Métis Western Arctic Land Claim is an example of difficulties inherent in the entrenchment of Aboriginal rights and titles to the land within the comprehensive claims process.

One large difference in today's agreement process is the growing local Aboriginal involvement in resource development processes and their sharing in the economic benefits. Without these elements, resource projects will not proceed nowadays. Canada's economy has traditionally been pushed and pulled by foreign direct investment (FDI), and foreign firms such as the United States' and Japanese multinationals, are keen to tap Canada's resources. This trend holds true for today's Canadian economy. For instance, currently, foreign (mostly the United States) investors own more than two-fifths of Canada's manufacturing and mining. No other advanced country has handed over so much economic influence to foreign firms (Clement and Williams 1997). Therefore, any plan of Canadian regional resource development is likely to succeed or fail within this external

economic fact. Even in such cases, however, it has become clear that unless the land claim of the affected Aboriginal sector is settled, the industry and government sectors cannot proceed with such resource projects. This is well reflected in the recent halt of the Mackenzie Valley pipeline project for the second time (April 2005); opposition of Aboriginal communities along the pipeline route stopped its first incarnation in the 1970s (Jaremko 2005).*

It is noteworthy that comprehensive land claim agreements provide significant economic benefits for Aboriginal communities in areas in which no treaty had been signed. Land claim settlements have provided northern Aboriginal communities with legal title to selected lands, cash payments, rights to manage natural resources, guarantees of traditional subsistence activities such as hunting, fishing and trapping, and the formation of economic development corporations, in return for surrender of their traditionally occupied lands. With these arrangements, Aboriginal communities in the north have obtained incentives to generate their own regional socio-economic change. Particularly, financial resources encourage the concerned Aboriginal communities to create business and income opportunities, and programs regarding wildlife conservation and resource management that will ensure the Aboriginal traditional lifestyle. As Usher (1998) argues, a type of economy proper to Aboriginal communities is a combination of subsistence hunter-gatherer activity and some market-oriented elements. A cash-generating business, such as the extractive economy, and Aboriginal traditional economy complement each other in order to maintain Aboriginal societies culturally and socially nowadays. On the one hand, equipment and supplies used for traditional forms of subsistence are expensive; without jobs, Aboriginal people cannot maintain their lifestyle (e.g., Stevenson 1996).

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* Negotiations have been continuing between the petroleum industry, First Nations and the federal government since then.

Limited financial capacities hamper them from entering into the business world. Compensation paid from the government in return for land surrender could make business opportunities, which would improve their sometimes devastated social systems, in which people have been suffering from poverty, lack of education, and poor medical conditions. Also, programs for wildlife management would guarantee a stable game harvest. Foods harvested from the land provide good nutrition for them and help in their family budgets because it would cost more if they had to buy food from stores (e.g., Nelson 2003). Since traditional subsistence is an integral part of their lifestyle, the continuation of hunting and trapping will sustain their culture. As Saku and Bone (2000) conclude, First Nations who obtained benefits earlier from comprehensive land claim settlements (i.e., the western Arctic Inuvialuit and the northern Québec communities whose settlements were signed prior to 1991) have significantly improved their economic situations more than those who did not (i.e., the central Arctic communities whose claims were settled in 1993). Therefore, comprehensive land claim settlements are indispensable for the strengthening of the position of Aboriginal peoples within Canada and their participation in the economy in areas where no treaties have been signed. Similarly, as the presence of Aboriginal peoples in the business circle has become important, Aboriginal peoples with treaty rights have begun to play an important role in business and resource management.

2.5 Conclusion

In this chapter, I discussed the position of Aboriginal peoples in Canada in terms of national economic development, looking back to the era of the fur trade. Because of Canada's rich natural resources, Aboriginal societies have been always affected by resource exploitation by the external world. It was the richness of natural resources that established a partnership between the Aboriginal and Euro-Canadian parties, but that at the

same time relegated Aboriginal peoples to a marginalized position in Canada's societies. Unfortunately, at the time of Confederation, Aboriginal people were not recognized as worthy partners. Through treaty making processes during the 19th and the early 20th centuries, most Aboriginal peoples surrendered title to the land in return for reserved lands and hunting and trapping rights on respective conceded lands. Their traditional lifestyle has gradually been encroached upon by the penetration of Euro-Canadian culture, impoverished by exclusion from wage employment, threatened by deterioration of environmental integrity.

However, since the 1970s the political and economic landscape has changed dramatically. Modern comprehensive land claim settlements have begun to be negotiated in areas where no treaty had been signed. Nowadays resource megaprojects would not proceed without local Aboriginal communities' involvement in economic development and their sharing in the benefits from the projects. Land claim settlements have provided considerable amounts of financial resources, recognition of hunting and fishing rights, and various programs for improvement of the traditional economy and their social conditions such as wildlife management, educational and health issues. These benefits have encouraged Aboriginal communities to enter a modern type of economy. Since Aboriginal communities are habitants of the land involved, resource (e.g., wildlife and forests) management has been often implemented in the form of co-management or co-operative management between government, industry and Aboriginal parties. This also holds true for Aboriginal communities who have already had treaties. Recently, there has been growing awareness that industry sectors regard First Nations as business partners in order to ensure the smooth running of their business and make good business with their collaboration (e.g., Anderson 1997; Hickey and Nelson 2005). Thus, there are possibilities that Aboriginal peoples will become partners with the non-Aboriginal sectors again. A relationship of mutual trust that was built in the fur trade years may be restored through

co-management, business cooperation, and so forth. In order to do so, Aboriginal rights that result from treaties and the constitution should be incorporated into regional economic development. This issue is discussed in detail in the next section.

3. Incorporation of Aboriginal and Treaty Rights into Resource Management

3.1 Introduction

While analyzing various management regimes for different types of resources, both renewable and non-renewable, in which various Canadian Aboriginal communities have recently been involved (Notzke, 1994), Notzke (1995) came to recognize a common thread running through every type of resource – co-management. Since the 1980s, Aboriginal involvement in resource co-management with non-Aboriginal parties has begun to be a popular institution in various parts of Canada. A comprehensive land claim agreement (CLCA), as noted in the previous chapter, is one of the promoters that triggers a co-management regime. Therefore, what are the indispensable components for Aboriginal communities to be part of co-management regimes? They are Aboriginal and treaty rights, and traditional ecological knowledge (TEK). On the one hand, Aboriginal rights are inherent rights that Aboriginal people have to maintain an Aboriginal way of life on their traditionally occupied lands (although, as discussed later, there is no single, accepted definition of Aboriginal rights). On the other hand, treaty rights only exist in areas covered by various treaties. Since the 18th century, many Aboriginal communities signed various treaties with the Crown, which have been applied to the Canadian landmass, and these treaties replace the Aboriginal rights of treaty Indians with treaty rights (I use this term here instead of *Aboriginal peoples with treaty* because the term *treaty Indians*, or *status Indian*, is commonly used and simple). Accordingly, the form and the content of such rights look to be almost the same, but their origin and nature are different in that Aboriginal rights arise from the "fiduciary obligations" (see Section 3.3.1) of an all-powerful Crown, and treaty rights from the specific wording of negotiated treaties (see Section 3.3.2). Also, traditional knowledge held by different Aboriginal communities about each environment has recently

increasingly been recognized as important in project planning, resource management, and environment impact assessment (EIA) processes. These three important components (Aboriginal and treaty rights and TEK), however, were not originally defined monolithically, but gradually defined in the current social, political and economic context, which has resulted in the concept of co-management. In this chapter, I would like to examine the current situation where the gradual confirmation and definition of Aboriginal land use in the judicial arena have possibilities of mobilising Aboriginal and non-Aboriginal societies.

3.2 Change in Interpretation of Aboriginal Rights

Let us start by reviewing the history where the definition of Aboriginal rights has gradually been shaped in court cases. The concept of Aboriginal rights has been intensively discussed in the judicial arena; however, it was not until 1973 that the existence of Aboriginal rights as such was recognized in the Court (Mainville 2001).

In 1971, the Nisga'a nation in British Columbia, as a Canadian Aboriginal people, claimed that their title to their traditional land still existed. In the ruling of the Supreme Court of Canada, the claim of the Nisga'a was rejected by four to three. However, this was a moral victory for them because six of seven judges first recognized that the Nisga'a had Aboriginal title to their ancestral territory. Three judges including Justice Hall stated that 'when the settlers came, the Indians were there, organized in societies and occupying the land as their forefathers had done for centuries' (*Calder v. A.G. of British Columbia* [1973:328]). He continues that their title to the land had never been extinguished until Aboriginal people voluntary gave it up. On the other hand, three judges including Justice Judson agreed that the title of the Nisga'a had been recognized in British common law at that time; however he insisted that Aboriginal title was extinguished when B.C. came into

existence. Since the last judge denied Nisga'a's claim for procedural reasons, the Nisga'a's claim was rejected.

This court decision came to have significant meaning in the Aboriginal court case history in Canada. In August of 1973, the federal government announced that it intended to settle land claims of First Nations residing in the areas covered by no treaties (Berger 1997). Subsequently, the James Bay and Northern Quebec Agreement was signed, and later, agreements were reached in the Northwest Territories and the Yukon.

What happened in favour of First Nations was that when Canada's constitution was amended in 1982, the existing Aboriginal and treaty rights were elevated into the constitution. Accordingly, Aboriginal rights that had been found at the common law level were further reinforced by section 35 of the *Constitution Act, 1982*. This constitutional recognition of Aboriginal and treaty rights gave a more powerful legal base to the court.

As for the scope of Aboriginal rights including their natural resource use, First Nations have had a long wait, until the latter part of the 1990s. In 1996, the Supreme Court of Canada first discussed the method of identifying common law Aboriginal rights in the case of *R. v. Van der Peet* (1996), but the scope of Aboriginal rights was defined in the narrow sense. In this case, the Sto:lo Nation woman Dorothy Van der Peet sold ten salmon and was convicted of breaking the Fisheries Act of British Columbia. She argued that trading fish was a traditional component of subsistence, and that this should be considered an Aboriginal right to be enjoyed. Chief Justice Lamer scrutinised what are crucial elements distinguishing Aboriginal societies from others, but he confined them to those practices, customs, and traditions that had existed before they had contact with Europeans. He concluded that the Sto:lo people developed a fishing trade after European contact and that this practice was not a distinct element of pre-existing Aboriginal society. Accordingly, the conviction of Van der Peet was upheld.

It was in the case of *Delgamuukw v. B. C.* in 1997 that the Supreme Court of Canada

elaborately defined the content of Aboriginal rights and title. In *Delgamuukw*, the Gitksan and Wet'suwet'en communities claimed full ownership and jurisdiction of the land, communal Aboriginal title and self-government. This time, Chief Justice Lamer found that Aboriginal title flows from the fact that Aboriginal people had used and occupied the land before the Crown asserted its sovereignty. While the assertion of Aboriginal rights needs the establishment of practices, customs and traditions prior to European contact, Aboriginal title does not require establishing such practices but needs establishing the fact that they had occupied the land before the Crown claimed its sovereignty. According to the *Delgamuukw* decision, Aboriginal title is part of Aboriginal rights as *sui generis* common law rights, which mean distinctive Aboriginal rights. Consequently, once Aboriginal title is established based on the prior land occupation, the concerned Aboriginal group can exclusively use and occupy the land for a variety of purposes, which "need not be aspects of those aboriginal practices, customs and traditions which are integral to distinctive aboriginal cultures" (*Delgamuukw v. B.C.* [1997:1083, paragraph 117]). This implies that Aboriginal peoples might use the land and resources for almost any purpose, even commercial use of natural resources, except, what the court says, in a destructive way that might jeopardise use by future generations*.

To sum, the last three decades saw a signal of changes in the interpretation of the scope of Aboriginal rights. Especially the *Delgamuukw* decision is influential. First, since Aboriginal title encompasses Aboriginal access to lands and resources and exclusive uses of them by Aboriginal people, traditional forms of subsistence will be ensured. Second, resource use by them on a commercial base is recognized as long as their relationship to the land is maintained: the extent of Aboriginal land use is widened. Therefore, recognition of

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* The *Delgamuukw* is different from *R. v. Horseman* (1990) and *R. v. Badger* (1996) in that the Court admitted commercial rights of Aboriginal communities. As for the *Horseman* and *Badger* cases, see page 38 onwards.

these two elements gave First Nations an incentive to regain self-empowerment, financial bases, healthy circumstances, and community sustainability on the land they traditionally occupied.

3.3 Treaty Rights and the Crown's Fiduciary Obligation

3.3.1 Fiduciary Obligation

The nature of treaty rights is well reflected in the origin of treaties that were signed between the Crown and Aboriginal nations. When the Crown intended to claim its sovereignty over the northern part of North America, Aboriginal peoples had already lived on the land. In order to reconcile the Crown's assertion of sovereignty with the fact of the prior presence of Aboriginal peoples on the land, a normative order was developed, which now is called the doctrine of Aboriginal rights (Mainville 2001:34-52, chapter 2). Whereas the Crown ensures that treaty Indians can continue traditional subsistence such as hunting, fishing, trapping and gathering on their traditionally used lands, the Crown asserted that their land should be left at the Crown's disposal. Moreover, the Crown declared that the lands reserved for Aboriginal nations were inalienable to a third party, but transferable only to the Crown after its surrender by the Aboriginal people (the *Royal Proclamation, 1763*). In the court case of *Guerin v. The Queen* (1984), Justice Dickson concluded that this unilateral discretionary power implicitly leads the Crown to the obligation of a fiduciary duty and responsibility.

3.3.2 Changes in Interpretation of Treaty – From Cases of Treaty Eight

While modern comprehensive land claim agreements are intended to be designed in detail, the past treaties have remained open to debate. Like interpretations of Aboriginal rights, that of treaty rights has been also shaped and reshaped in a lot of court cases. To

illustrate this judicial situation, let me raise Treaty Eight and associated court cases and regulation, which are relevant to our discussion on the Treaty Eight signatory, the Little Red River Cree Nation (LRRCN).

Treaty Eight made in 1899 states:

> Her Majesty the Queen HEREBY AGREES with the said Indians that they shall have right to pursue their usual vocations of hunting, trapping and fishing throughout the tract surrendered as heretofore described, subject to such regulations as may from time to time be made by the Government of the country, acting under the authority of Her Majesty, and saving and excepting such tracts as may be required or taken up from time to time for settlement, mining, *lumbering*, trading or other purposes. [Underline added; As for *lumbering*, see the discussion below on the 1999 court case of Halfway River First Nation. Henceforth stated as *Halfway*.]

Since 1867, when the *Constitution Act, 1867* was issued, Parliament has been vested with legislative authority. However, since treaties are prerogative instruments (and moreover constitutionally affirmed and recognized after 1982), treaties are enforceable without any Parliamentary approval. "The Government of the country" as stated in the above clause meant the Dominion government at the time of the signing of the treaty; therefore, through the treaty the federal government was to ensure that the traditional economy of Treaty Eight Indians, such as hunting, fishing and trapping, could continue. Also, this clause meant the treaty rights were subject to regulations made by the federal government. This legal situation took a new turn after the rest of the Prairie Provinces (Saskatchewan and Alberta) came into existence in 1905 (the first Prairie Province Manitoba already had been created in 1870). In 1930, jurisdiction over the Crown land (with some exceptions including Indian reserves) and natural resources on and under it were transferred from the federal to the Prairie provincial governments (Manitoba, Alberta, and Saskatchewan). (In December 1929, the federal government made a Memorandum of Agreement (MOU) with each Prairie Province concerning the transfer of natural resources. The three MOUs are

quite similar, and conventionally they are called the *Natural Resources Transfer Agreement* (NRTA). The following year, each one was entrenched as Schedule (2) in the *Constitution Act, 1930* [henceforth, as for the text of the NRTA, I refer to the *Constitution Act, 1930*].) With this, the Prairie Provinces assumed ownership of resources within their boundaries, such as forested tracts, for economic purposes, and this is why the provinces now can give resource tenures (e.g., licences) to the industry sector. Although the provincial laws do not regulate treaty rights, they actually have become influential to the treaty rights of Aboriginal communities within the Prairie Provinces. Section 12 of the *Constitution Act, 1930* states:

> In order to secure to the Indians of the Province the continuance of the supply of game and fish for their support and subsistence[,] Canada agrees that the laws respecting game in force in the Province from time to time shall apply to the Indians within the boundaries thereof, provided, however, that the said Indians shall have the right, which the Province hereby assures to them, of hunting, trapping and fishing game and fish for food at all seasons of the year on all unoccupied Crown lands and on any other lands to which the said Indians may have a right of access. [Underline added]

Thus, hunting and fishing rights of the Prairie Aboriginal peoples became covered by two separate regulations. This dual structure of treaty rights has aroused controversy about the scope and nature of the treaty right to hunt. In 1990, the hunting right of Treaty Eight signatory Aboriginal peoples was tested by the Supreme Court in *R. v. Horseman*, and revisited in *R. v. Badger* in 1996. In the *Badger* case, Messrs. Badger, Kiyawasew, and Ominiayak were charged with an offence under the Alberta's *Wildlife Act* (1984, sections 26(1) and 27(1))*. One of the major issues of the law was whether or not the right to hunt

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* These two clauses of Alberta's *Wildlife Act* (1984) are the following:
section 26 (1): A person shall not hunt wildlife unless he holds a licence authorizing him, or is authorized by or under a licence, to hunt wildlife of that kind;
section 27 (1): A person shall not hunt wildlife outside an open season or if there is no open season for that wildlife.

was impermissibly infringed upon by the provincial Wildlife Act. To make a long story short, Justice Cory concluded that provincial legislatures could not extinguish treaty rights. (Messrs. Badger and Kiyawasew, however, were found guilty for other reasons.) In addition, the Court ruled, based on the *Horseman* case and modifying its position, that the NRTA modified the treaty right to hunt with a clear intention "by eliminating the right to hunt commercially but enlarged the geographical areas" (*R. v. Badger* [1996:815, paragraph 83]). For the former, it was confirmed that Treaty Eight Indians were to enjoy "the right to hunt [only] for food" (*R. v. Badger* [1996:797, paragraph 48]). For the latter, the Court decided that Aboriginal hunters could have access to unoccupied lands within the province, which was "not put to visible use" (*R. v. Badger* [1996:808, paragraph 66]).

The significant point in this court decision is that the Court raised the following principles applicable to interpretations of treaties and regulations concerning Aboriginal peoples (*R. v. Badger* [1996:793-794, paragraph 41]):

1) Since the Crown imposed the exclusive nature of the relationship to Aboriginal peoples with treaties, 'a treaty represents an exchange of solemn [and sacred] promises' between them.
2) 'The honour of the Crown is always at stake.' Interpretations of treaties must be approached 'in a manner which maintains the integrity of the Crown'.
3) 'Any ambiguities or doubtful expressions in the wording of the treaty [...] must be resolved in the favour of Indians [the Aboriginal party involved]'.
4) In case the regulatory party restricts or extinguishes a treaty or a treaty right, the party is responsible for proving 'a clear and plain intention' to carry out such restriction and extinguishment.

Moreover, in the *Horseman* and *Badger* cases, the historical and cultural contexts in which treaties were concluded were regarded as important in their interpretation (see *R. v. Horseman* [1990:933]; *R. v. Badger* [1996:801, paragraph 55]). In *Badger*, because of

the fact that Aboriginal peoples made their agreement orally, the oral history of the Treaty Eight Indians and archival sources such as the Treaty Commissioners' reports, affidavits, and diaries were used (see Daniel 1979; Fumoleau 1973). Incidentally, after the *Horseman* and *Badger* cases, Tough (1995) and Irwin (2000) submitted their comments on these court judgements, saying that although the Court considered the historical context where the treaty was made, the process of the NRTA being made was not taken into account. They argued that there is a possibility that it had not intended to extinguish hunting rights. This issue may arouse more controversy, and further research is needed to determine this.

To conclude, just as the scope of Aboriginal rights are ambiguous, interpretations of treaty rights are to a great extent dependent on courts' rulings. However, Aboriginal treaties have begun to be interpreted in favour of Aboriginal peoples. Key phrases are treaty as a solemn promise, the honour of the Crown, and fiduciary obligation.

3.4 Aboriginal Court Cases Associated with Forestry

3.4.1 Introduction

So far I have shown that the scope and the nature of both Aboriginal and treaty rights gradually have been defined in courts. What I would like to discuss in this section, however, is that Aboriginal and treaty rights as such are not absolute, particularly in the presence of resource development that takes place on Aboriginal traditional lands. It is true that the upgrade of existing Aboriginal and treaty rights to constitutional status is significant. Owing to the terms of section 35 of the *Constitution Act, 1982*, the competent legislative authority (i.e., Parliament) cannot extinguish Aboriginal rights unilaterally. Also, the Crown's fiduciary obligation, which results from the exclusive nature of treaty, is entrenched in the constitution. However, as noted in the previous section, there are possibilities that a provincial legislature may enact provincial regulations, from time to

time, that infringe on or impair those rights. Now, I move to issues of what if such legislations and resulting activities take place.

3.4.2 A Meaningful Consultation to Accommodate Aboriginal and Treaty Rights

I shall advance my discussion by using court cases. In the 1990 case of *R. v. Sparrow*, the Supreme Court of Canada outlined a two-step process for reviewing justification of infringement of Aboriginal rights. This is what is called *the Sparrow test.* The question of the first step is, is there a *prima facie* infringement to Aboriginal rights of the concerned communities? If so, the test goes to the second step, which raises the question of whether the government may justifiably infringe upon the rights. The second question is also to be answered step by step. First of all, is there a valid and compelling legislative objective? For instance, general economic development such as "agriculture, mining, forestry and hydroelectric power, as well as the related building of infrastructure and settlement of foreign populations" were found to be valid legislative objectives (see *Delgamuukw v. B.C.* [1997:1133, paragraph 202]). So are conservation measures for the fisheries and resource management (see *R. v. Sparrow* [1990:1116]). If a valid legislative objective is found, next, does the government treat the affected Aboriginal peoples fairly enough to maintain the honour of the Crown? In other words, once a valid objective has been realized (e.g., conservation measures), top priority must be given to the Aboriginal side (e.g., the right to fish for food). Furthermore, the Supreme Court raised three requirements as examples of the factors to determine if the government properly discharged the burden of justification as follows:

1) "Whether there has been as little infringement as possible,"

2) "Whether [..] fair compensation is available," and

3) "Whether the [A]boriginal group in question has been consulted" (*R. v. Sparrow* [1990: 1119]).

In *Badger*, the Court actually transposed the application of this Sparrow test from Aboriginal rights to treaty rights. Therefore, we can equate Aboriginal with treaty rights in terms of using this test for justifying governmental legislation. To sum up, the government may owe an obligation to justify the legislative objectives if they have the possibility of affecting certain Aboriginal communities.

In the case of forestry, the most pertinent factor may be the third factor: the question of whether the affected Aboriginal communities have been properly consulted beforehand. In *Delgamuukw*, the Supreme Court held that consultation with Aboriginal peoples must be conducted by government "in good faith, and with the intention of substantially addressing the concerns of the aboriginal peoples whose lands are at issue" (*Delgamuukw v. B.C.*, [1997:1113, paragraph 168]).

Following *Delgamuukw*, in 1999, the British Columbia Court of Appeal, the highest provincial court, decided that fair consultation was needed to prevent unjustifiable infringement on the treaty right of the Halfway people (*Halfway River First Nation v. the British Columbia (Minister of Forests)* [1999]). The Halfway are descendants of the Beaver who signed Treaty Eight in 1890, and this fact leads to their possession of treaty rights under Treaty Eight. In this court case, they claimed that their hunting right was infringed by a Cutting Permit (CP), which had been bestowed upon Canadian Forest Products Limited (Canfor), allowing it to harvest on Crown lands. The company side appealed that their CP was within the scope of the Treaty Eight clause saying that the land ceded by the Halfway "may be required or taken up from time to time for [,among other purposes,] lumbering" (Treaty Eight, 1899, emphasis added). The court ruled that such timber harvesting licence should be quashed because "the Crown failed in its duty to consult" the affected nation (*Halfway River First Nation v. the British Columbia (Minister of Forests)* [1999:45, paragraph 167]).

Most recently, in November 2004, a landmark ruling was made by the Supreme

Court of Canada in *Haida Nation v. British Columbia (Minister of Forests)* (henceforth *Haida*), in concert with the companion case of the Taku River Tlingit First Nation (henceforth Taku River). In *Haida*, the issue was a logging right called a Tree Farm Licence (TFL), which was transferred in 1999 by the B.C. government to a large forest company Weyerhaeuser. That timber harvesting right was originally issued to the MacMillan Bloedel Limited in 1961, and covers a quarter of the Queen Charlotte Islands or Haida Gwaii, to which the Haida had been claiming their title for years. The Haida argued that such transfer of the timber rights without proper consultation encroached on the forested area that was vital to their culture and economy. On the other hand, the B.C. government argued that it had passed its fiduciary responsibility down to Weyerhaeuser and therefore it did not have to consult with the Haida and that the company did inform the Haida that they were taking over the TFL. The Court held by seven to nothing that "the government's duty to consult with Aboriginal peoples and accommodate their interests is grounded in the honour of the Crown" (*Haida* [2004: 522, paragraph 16]) and that the Crown's honour cannot be transferred and that consultation was not sufficient. Justice McLachlin decided that even though title to the land in question has not been settled yet, the Haida were able to require the government to consult them. Moreover, she states that at all stages of a consultation process, good faith was required from both the Crown and Aboriginal sides.

> However, there is no duty to agree; rather, the commitment is to a meaningful process of consultation. As for Aboriginal claimants, they must not frustrate the Crown's reasonable good faith attempts, nor should they take unreasonable positions to thwart government from making decisions or acting in cases where, despite meaningful consultation, agreement is not reached. [*Haida* 2004:532, Paragaph 42]

Consequently, in the companion case, on the grounds that the Taku River had been already consulted adequately by the government with regard to a mine proposal near Atlin,

northern British Columbia, the Court ruled against the Taku River (*Taku River Tlingit First Nation v. British Columbia (Project Assessment Director)* [2004]). For the Aboriginal side, problems of this decision may be: 1) the veto (the final decision regarding the proposed project) was not left to the Aboriginal side and 2) the responsibility for conducting direct negotiation with the Aboriginal groups was not given the company. (Previously, the provincial Court of Appeal ruled that both the Crown and the forest company must consult with the affected Aboriginal groups in order to accommodate their rights and interests [see *Haida Nation v. British Columbia (Minister of Forests)* (2002)]). There is a concern that forest companies may be freed from any considerations regarding the affected local communities (Kennedy 2004). Nevertheless, this ruling may have the possibility of moving the government to proceed with negotiation with those Aboriginal groups whose land claims have not yet been settled.

In this way, the governments have come to have the responsibility to consult Aboriginal communities who may be affected by resource development. As Justice McLachlin states, it is important for both the government and the Aboriginal sides to make every effort to share each other's interests. Proper consultation processes may play an important role in the decision-making of resource development projects.

3.4.3 Treaty Rights and Logging – The Maritime Provinces

I would like to end this section by discussing Aboriginal access to forested land. On January, 2005, the Supreme Court of Canada started hearing an appeal requested by the New Brunswick government saying that there were no treaty rights that would allow Aboriginal groups to harvest timber on provincial Crown land (Makin 2005). This issue started when a Mi'kmaq logger Joshua Bernard harvested timber on Crown land near the Eel Ground Reserve, central New Brunswick, where he lives. After two lower court judges ruled against the Mi'kmaq appellant, the New Brunswick Court of Appeal ruled that his

right to log on the Crown land flowed from the eighteenth-century treaties, which had allowed his ancestors (a couple hundred members of the Mi'kmaq and the Maliseet living there in those days) to hunt, fish and gather on the land in pursuit of their livelihoods (Richer 2003). The court held that as long as the Mi'kmaq pursued a "moderate" living, they were to have a fair right to access to identified resources, irrespective of the restriction of the Forests Act (*R. v. Bernard* [2003]). Then, the province decided to appeal the Appeal Court's ruling to the Supreme Court by claiming that modern-day logging should be incompatible with a treaty right, which was applied to a small segment of Aboriginal population in 1760. In addition to this New Brunswick case, the appeal hearing of January 2005 would deal with the companion case involving timber harvest rights of the Nova Scotia Mi'kmaq.

In the Maritime Provinces, Aboriginal logging actually has been a volatile issue since the Paul case of 1998. A Mi'kmaq logger Thomas Peter Paul was charged with illegally logging on the Crown land that had been leased to a New Brunswick forest company. When the New Brunswick Court of Queen's Bench ruled that he was not guilty on the ground that eighteenth century treaties gave New Brunswick Mi'kmaqs the right to harvest on the Crown land commercially, its decision was welcomed by the concerned communities where unemployment rates topped 85 per cent (Anderssen 1998a). On top of that, these communities had been suffering from suicide, drinking, and domestic violence, and they needed an incentive for economic improvement. However, five months later, the Court of Appeal overturned this lower court's decision. Many Mi'kmaq were angered and a day of protests was staged by Aboriginal loggers.

What gave incentives for Mi'kmaq groups in New Brunswick and Nova Scotia was the Marshall decision for Aboriginal fishery, which was held by the Supreme Court of Canada in September 1999 (*R. v. Marshall*). Donald Marshall, a Mi'kmaq fisherman in Nova Scotia, had been convicted of fishing eels out of season without a licence, using an

illegal net. The court found that Marshall had a right to fish, irrespective of current fisheries regulations, and that a right had been protected by a treaty from the 1760s. This court decision caused a sensation among non-Aboriginal fishers (Wood 2000). Aboriginal loggers expected what the Marshall case did for fishing should be applied for Aboriginal Rights to access to forest resources. Also, in those days, the landmark *Delgamuukw* decision had just come out, which ruled the Aboriginal communities had a constitutional right to ancestral lands and could use them, so they expected the same thing would happen in the Mi'kmaq communities.

For both parties, the provincial and the Aboriginal, if access to the land was unilaterally bestowed upon one side, the other side's economy is at stake. Since New Brunswick's forests fed a $ 2.8 million industry each year (Anderssen 1998b), the province would not concede the ownership. On the other hand, the Aboriginal communities are keen to secure a means of economic development. It depends on future courts' decisions on whether Aboriginal access to Crown forests will be allowed.*

At the end of this section, I shall suggest that it would be wise for both parties to meet each other halfway. Right after the 1998 decision in which the appeal court dismissed the Mi'kmaq's appeal, tensions grew among Aboriginal loggers and provincial authorities. Anger just widens the chasm lying between them. At that time, the province offered reserves five per cent of the annual harvest in an attempt to ease tensions. A court case usually takes long and is expensive. Moreover, what was found in one case of a certain district cannot always be applied to other cases in different areas. This is because once a case is brought into the Supreme Court, the Court analyses it along the legal context

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* The court decision came out on 20 July 2005, when I have just finished a draft of this thesis. The Supreme Court of Canada unanimously upheld the conviction of 35 Mi'kmaq Indians in a pair of logging cases (the New Brunswick and Nova Scotia cases) on the basis that the so-called peace treaties in the 18th century gave Aboriginal communities the right to trade, but that this cannot be interpreted in today's terms as a right to operate commercial logging enterprises on Crown Land (Sallot 2005).

specific to that locality. Therefore, although a court decision provides for a strong political and legal base, other strategies such as compromise and talks would be preferable. It is important to create a situation where different interest groups sit down and discuss the matter as resource users. Resource co-management would be one of the solutions.

3.5 From Consultation to Community-based Research

3.5.1 Environmental Impact Assessment and Public Consultation

If a resource development project is launched for a certain area, how is the act of consulting carried out in order to take into account Aboriginal and treaty rights of the First Nations which may be affected by the project? If timber harvest operations are planned for a certain forested tract, will safety measures possibly be taken so that the forest still can support traditional economy of the nearby Aboriginal communities? We have seen in the *Haida* case that the Crown's obligation to consult does not extend to the forest company (see Section 3.4.2). Since the court rules depending on different legal situations of different localities, this court decision cannot be generalized to the whole country. Conventionally, at the provincial level, companies that sponsor major resource use projects are required to evaluate the environmental impact of the projects and find a means of minimising the negative impact of their activities on the environment and natural resources of the particular areas. (For instance, in Alberta, the *Environmental Protection and Enhancement Act, 2000* has a legislative power to enforce it.) Usually, companies hire consultants to carry out environmental impact assessments (EIAs) and produce assessment reports. It is common that resource companies do not have a section dealing with consultation. Recently, there has been a growing demand for public input in the EIA process of a resource use project, such as the petroleum and the forest industries (as for forestry, see the guideline of Alberta's Land and Forest Service [1998]). Indeed, the people

who actually live there are familiar with a proposed project's physical site and probable environmental effects. To put the consultation process simply, from the proposal of a project to the completion of an EIA report, the community members who may be affected by the proposed activity will be provided opportunities to express their opinions and concerns about it. These communities' comments would be included in the EIA report. Before it would be forwarded to the (provincial) government agencies concerned, the company would present it to the public for review, usually, through public hearings and open houses that the company sets up (e.g., Alberta Environment 2004). However, as things stand, such two-way information flow is not always realized. For instance, a forester working for West Fraser, which has the forest tenure around the Lesser Slave Lake, central Alberta (see Figure 1.1), says that although the company sets up an open house, people don't come, and insists that people don't complain before things start, but after (George Duffy, personal communication, September 2003). It is true that documents that companies make usually include a lot of technical and scientific terms that are hard for ordinary people to understand, and laws and regulations concerning EIAs are very complicated (Urquhart 1998). Also, even though open houses and public hearings were provided, not all of the people are willing or able to speak out their opinions in public (Beckley 1999). These kinds of difficulties associated with public involvement in decision-making have been analysed very well in environmental sociology circles (e.g., Baskerville 1988; Chess 2000; Higgelke and Duinker 1993; Shindler and Neburka 1997; Tanz and Howard 1991; Tuler and Webler 1999). If the consultation process among Euro-Canadian parties contains a lot of problems, how much more difficult when this task is to be carried out between Aboriginal and non-Aboriginal communities?

In the case of Aboriginal communities, the companies may voluntarily or be required to undertake to study the project's impact on traditional land use of the affected Aboriginal communities and specify in the report a means for avoiding or mitigating the

negative effect on their values of the land, which are pivotal areas for Aboriginal people to maintain their economy and culture. However, as discussed above, Aboriginal concerns are not always fully taken into account in the report. For instance, Shell Canada Limited documented their TLU assessment carried out in the Fort MacKay and Fort Chipewyan areas (see Figure 1.1), where it planned oil sand development, but it is hard to say that document covered various Aboriginal land uses and incorporated treaty rights in the analysis process by using relevant information (Shell Canada Limited 2002). One of my colleagues criticised the consultation process because it was "merely going through the motions" (Westman 2003). The next section turns to TLU study and associated issues.

3.5.2 Traditional Land Use Study (TLUS) and Traditional Ecological Knowledge (TEK)

In order to articulate the existing or the potential conflict between Aboriginal land use patterns and external resource developers' projects, it is necessary to grasp their values embedded in the community landscape that supports their traditional economy. In Canada, recent Aboriginal land use studies arose to meet this kind of socio-economic need and have developed in concert with a sequence of land claim settlement agreements (Natcher 2001). Aboriginal peoples have unique ways of using specific geographical landscapes, and recording and mapping historical and cultural aspects of them will gradually provide communally accepted Aboriginal values and views of the land (e.g., Hickey 1999). These studies have been often called traditional land use study (TLUS), traditional land use and occupancy studies (TLUOS) and so forth (Honda-McNeil and Parsons 2003). The main phase of a TLUS includes numerous interviews with elders, hunters and trappers from communities. By doing so, the making of maps based on their accounts will visualize their harvest sites for fish, birds, fur-bearers and wildlife and plants, the seasonal round, population dynamics of wildlife, fixed sites of cabins, associated travelling trails, graves and historic sites (Robinson and Ross 1997). With the advance of computer technology

including global positioning systems (GPS) and geographical information systems (GIS), these studies have been progressing remarkably, and helping a comprehensive understanding of Aboriginal traditional and current land uses.

Another important thing to be revealed by TLUS is traditional ecological knowledge (TEK) held by the concerned Aboriginal communities, which should be taken into account in the research framework. TEK is the sub-set of the cultural knowledge held by Aboriginal peoples as part of their longstanding relationship with the landscapes they occupy. In other words, TEK is empirical, factual, rational knowledge on the specific geographical areas. Many Aboriginal peoples from different communities each have been engaging in hunting and trapping in particular places for years. This lifetime engagement in their environments has given them significant insights into the dynamics of long-term natural environmental processes. They have known that each part of the environment has been changing interrelatedly with the whole. Also, such environmental knowledge has been passed on from generation to generation, and some portion of the knowledge has been shared among community members and has developed to such an extent that it has formed their cultural values. Therefore, different communities have, or may have, different sets of TEK. In this sense, TEK reflects a holistic and cultural understanding of a specific environment by each community and shows a remarkable contrast with the *Western* scientific ecological knowledge (SEK). The Western science-based understanding of the environment is rather reductionistic in that work is carried out by only focusing on a particular component of an environmental system and therefore a comprehensive understanding of a natural environment is not necessary to pursue the work (Usher 2000). The precise documentation of TEK will lead to systematic understanding of an Aboriginal worldview, their unique approach to the land, and the nature of the traditional economy carried out in the bush. There are growing expectations that if TEK and SEK complement each other, a better holistic perspective of the environment will be reached.

The incorporation of TEK into environmental assessment has grown to attract much attention at the government level. I have mentioned above that EIAs are led by provinces if resource use projects aim at provincial areas. In the case of projects aiming at federal lands or trans-boundary resources, federal environmental assessments are called for. Furthermore, the federal government from time to time interferes in provincial EIAs depending on the scale and the nature of resource projects, and in that event, the federal and a provincial governments jointly work on the process (e.g., the Alberta-Pacific EIA carried out in Alberta in 1989–90; as for the issues associated with the developmental processes of the mill of the Alberta-Pacific Forest Industries Inc. (Alpac), see Sections 4.4.3, 6.3.4, 6.4.4). Federal environmental assessment is regulated by the *Canadian Environmental Assessment Act, 1992* (CEAA). In October 2003, the CEAA were amended and gives responsible EIA conductors the discretion to consider TEK in any EIA (Canadian Environmental Assessment Agency 2004). Section 16.1 of the CEAA states "Community knowledge and aboriginal traditional knowledge may be considered in conducting an environmental assessment". Accordingly, responsible authorities for an EIA may be required to promote communication and cooperation with Aboriginal peoples, who may be affected by their development activities, with respect to environmental assessment (section 4 (1) (b.3)) and assess environmental effects of the plan on the current use of the lands and the resources for traditional purposes by Aboriginal peoples (section 2). Thus, in the EIA processes, Aboriginal and treaty rights should be taken into account.

3.5.3 Participatory Action Research (PAR) Methodology

However, Aboriginal people are liable to be reluctant to release their TEK in environmental assessment processes whose research schemes are externally defined and controlled by government and other responsible authorities. One of the major concerns they have is that TEK might be misunderstood and misinterpreted by the outside world.

TEK is deeply rooted in Aboriginal land use patterns and cannot be interpreted out of the Aboriginal cultural context (e.g., Natcher 2001; Stevenson 1996; Usher 2000). Another reason for their reluctance is that Aboriginal peoples have been concerned about abuse of their intellectual property (e.g., Stevenson 1997). Once placed in the public arena, their knowledge, about medicinal plants for instance, might be used by external interests for commercial purposes. Therefore, where Aboriginal communities do not see more benefit than they do damage, they are hardly likely to tell their traditional knowledge to consultants coming from outside the communities. Berkes (1994) evaluates the extent of communication held between the Aboriginal and non-Aboriginal sides regarding resource use on a scale from one to eight. His typology is based on Arnstein's (1969) eight-rung ladder model, which illustrates that public participation in governmental policy-making processes lies in a wide spectrum ranging from manipulation to citizen control (Figure 3.1).

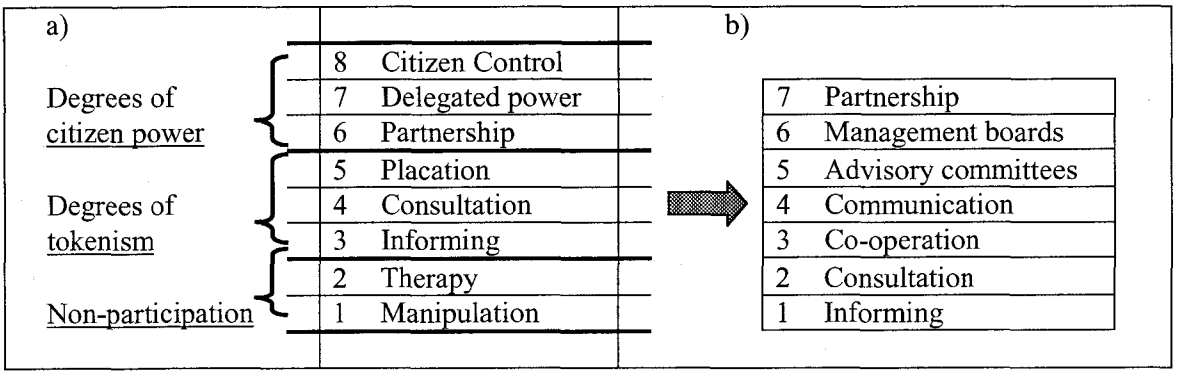

Figure 3.1. The comparison between a) Arnstein's (1969) eight-rung ladder model and b) Berkes' (1994) evaluation scale (Arnstein's Eight Rungs on a Ladder of Citizen Participation are divided into three clusters (1-2; 3-5; 6-8); Berkes' seven levels of the power relationship between Aboriginal and non-Aboriginal [e.g., government] parties)

NB Berkes (1994) originally aims to make a typology of co-management regimes of natural resources which have been carried out between Aboriginal and non-Aboriginal parties, but I find that we can transpose this typology to the power relationship that would take place in an environmental assessment process.

According to Berkes' (1994) evaluation scale, consultation is situated at the lower level, where more than one-way communication occurs, but two-way communication may or may not be realized. Indeed, at this level of the environmental assessment ladder, several negative things will likely happen: there will be procedural inconsistencies, a failure to provide adequate explanation of the proposed activities, and lack of time and technical support for the Aboriginal communities to digest the nature of the proposed project. As a consequence, all contribute to discomfort on the Aboriginal side. They are likely to be suspicious of the external societies, there will be a feeling that their concerns will not reach the responsible authorities, and they will feel resentment of the assessment itself, arguing that their Aboriginal and treaty rights were infringed.

In order to avoid conflicts and realize more meaningful consultation processes, recently a participatory action research (PAR) methodology gradually has been adopted. A PAR methodology is to facilitate a community-driven research process by training local people to be involved in the design and implementation of the research (Natcher 2001; Robinson and Ross 1997). If communities are willing to be involved intensively in the research and to change power relationships for the better, this approach will bring about the greater use of community research resources and a sense of inclusiveness of the communities themselves into the assessment process. In so doing, the Aboriginal communities can decide what information is to be shared with others, and themselves as well, and how the sharing will be carried out. Accordingly, they can respond with valuable information that would be more relevant to the research process than when the external consultants previously designed the research scheme. Through her observation of the environmental assessment carried out in an Aboriginal community in Ontario, McGregor (2002) found that under the research approach where the community can retain control over the process of sharing knowledge, TEK holders including elders were able to share their knowledge with not only the external societies but also among themselves,

particularly with the younger generation. Usually a TLUS has been carried out by the dominant (Western) society's interests, methodology and ideology (Assembly of First Nation 1995; Stevenson and Webb 2003); however, in cases where research design is left to the discretion of Aboriginal communities concerned, there are possibilities of reducing cultural barriers between both parties and protecting Aboriginal and treaty rights within the institutional framework. Thus, a participatory TLUS has the possibility of bringing about a meaningful consultation process into Aboriginal communities (Natcher 2001). In other words, meaningful consultation does not merely mean just consultation. It should bring about mutual learning and mutual exchange of information between and within the parties involved. Implementing this will inevitably make the power relationship rise on Berkes' (1994) ladder.

3.5.4 Towards Co-Management

As Natcher (2001) argues, however, there is a limit to this meaningful consultation that would result in participatory TLUS. As we have seen in a series of Aboriginal court cases, the political power is ultimately left in the hands of government. Also, apart from the Territories where CLCAs were settled, jurisdiction over Aboriginal lands and resources have continued to be unilaterally in the provinces' hands. One-time realisation of meaningful consultation will not give rise to lasting equitable power relationships to Aboriginal communities. Under this situation, empowerment of Aboriginal communities will hardly likely happen. Actual resource use conflicts have been continuing in this political context. This is why many Aboriginal communities have entered into resource co-management (co-operative) regimes with governments and the industry sector, seeking lasting *influence* over lands and resources. (As discussed in Section 6.4.4, as long as provincial governments retain jurisdiction over land, Aboriginal communities cannot gain *control* over lands and resources on even terms with governments.) Unless Aboriginal

communities can share interests and responsibilities for their land with the external world on equal terms, they will not be able to protect Aboriginal and treaty rights. Therefore, the Crown's thorough observation of fiduciary obligation to the Aboriginal peoples, diversification of Aboriginal communities' strategies to convince governments and the industry side, and further research on Aboriginal empowerment – all need to be done in order to maintain Aboriginal and treaty rights within their traditional land.

3.6 Conclusion

I started this section by discussing the nature and scope of Aboriginal and treaty rights. Canadian Aboriginal rights flow from the fact that Aboriginal peoples had lived in the northern part of North America before European contact. The doctrine of Aboriginal rights started when the Crown unilaterally claimed its sovereignty over the land by limiting Aboriginal control over the land. Treaty represents an exchange of solemn promises between the Crown and Aboriginal peoples. The honour of the Crown is always at stake so it must not fail to fulfill its promises. Therefore, the Crown must assume the fiduciary obligation to maintain its integrity. In cases where Aboriginal and treaty rights may be infringed, the Crown has duty to consult the affected Aboriginal communities, so that they may continue their traditional economy such as hunting, fishing and trapping on the land, which is pivotal to their social and cultural sustainability. I have discussed that this interpretation of Aboriginal and treaty rights has been defined only for the last three decades and that it has begun to mobilize Aboriginal and non-Aboriginal societies.

If proposed resource development projects may encroach Aboriginal traditionally occupied lands and if they are the federal lands, the onus is on the Crown (the federal government) to undertake consultation. Aboriginal participation and incorporation of TEK to the EIA process have gradually been given weight at the federal level. A

community-based TLUS has the possibility of bringing control of the sharing of their knowledge and realizing meaningful consultation.

However, in cases where unequal power relationships still remain, unless Aboriginal communities gain influence over their land and resources, their Aboriginal and treaty rights will likely not be protected in the long run. In this political context, many Aboriginal communities have begun to enter into resource co-management regimes. For instance, Treaty Eight signatories in northern Alberta (the Whitefish Lake First Nation, the Little Red River Cree and Tallcree First Nations, and the Horse Lake First Nation) each signed memorandums of agreements (MOUs) in 1994, 1995, and 1997 respectively, and entered into forest co-operative management with the provincial government. According to the typology of Aboriginal co-management by Notzke (1995), as introduced in the beginning of this chapter, there is one called *strategic* co-management. Aboriginal communities began recognizing that the Euro-Canadian political institution of co-management could be a means for their empowerment. This type of co-management regime is triggered by themselves. She points out that they are aware that "a gradual transformation in the idea of social justice and environmental consciousness on the part of mainstream society" could have positive or negative effects on Aboriginal resource management (Notzke 1995; 205). Whether or not their resource co-management regimes with non-Aboriginal parties are going well depends on their course of action that they decide. Before I discuss LRRCN/TFN's forest co-management in the final chapter, this shift in social thought is discussed in the next chapter.

4. The Perception of the Environment Mobilizing Human Society

4.1 Introduction

Aboriginal forestry, this study's theme, is a new enterprise, where industrialized, profit-oriented timber production is pursued, but the close relationship to the forest is still maintained by Aboriginal communities; therefore, it is necessary to consider the Aboriginal relationship to the natural environment. However, all over the world nowadays the dominant language of discourse and the methodologies to approach nature are based on Western-born thoughts and sciences – physics, chemistry, biology, ecology, environmental policy making theories, ethics and so forth. In order to discuss the Aboriginal human-nature relationship, their perspectives and values of nature in a proper context, I believe that it is better to contrast Aboriginal with non-Aboriginal views of nature. Therefore, before I tackle Aboriginal issues, I shall discuss non-Aboriginal views of nature. I provide two separate chapters: Chapter 4 discusses Western perspectives and approaches towards nature, and Chapter 5 presents Aboriginal, or autochthonous, ways of engaging in nature-based lived experiences and practices. I start this chapter by raising two antithetical worldviews of the human-nature relationships that arose from the Western tradition: the expansionist worldview and the ecological worldview.

4.2 Use versus Protection

4.2.1 The Expansionist Worldview

Let us review the history of the expansionist worldview and its approach towards the natural environment. The origin of the expansionist worldview is traced back to the Latin West in Europe in the Middle Ages. In Roman times, northern European forests still remained because agricultural lands were confined to well-drained areas. As agricultural technology and equipment improved, such as the invention of heavy mouldboard ploughs,

poorly drained areas gradually became available between the fifth and the tenth centuries (McNeil 1990:452). These forested lands were regarded as "frontier," and a reclamation movement was spurred on from the eleventh century onward into the 13th century. The increase of food production led to rapid population growth, and new villages and towns burgeoned across Europe. Soon, by the 14th century, forests became scarce, which halted the internal European expansion. However, technical and technological improvement in navigation led to the overseas Western expansion, and the shortage of land, which was at stake under the feudal regime, was overcome. The 16th century saw the growing political dominance of Western Europe over the globe. The frontier shifted from the internal to the overseas wilderness. Portuguese and Spaniards, later Dutch, British and French, explored Asia notably India and China, Americas, and Africa, to seek for more access to rare and valuable goods that could not be found in Europe (McNeil 1990:565-568). During the era of the Western expansion, people experienced a massive influx into European ports not only of spices and specie (and precious metal), but also of bulk commodities, such as sugar, indigo, tobacco, timber, fish and so forth. It was those staple products, rather than gold and silver, that stimulated the European markets and accelerated the European manufacturing industry (Kennedy 1987:3-30 [chapter 1]; McNeil 1990:558-559, 583-585; Wallerstein 1976:32-34). The frontier became a storehouse of natural resources, and people began to contemplate the boundless expansion of the world, unlimited natural resources outside of Europe, and continuous economic growth that they might be able to enjoy.

This historical flow, particularly the clearing of forests, can be grasped from a viewpoint of European thought and religion because the human act is backed up by what they think about themselves in relation to things around them. It was Christianity that justified man's conquest of nature (White 1968:75-94 [chapter 5]). An all-powerful God had made nature, but man was made in God's image. Accordingly, man shares God's transcendence of nature. All physical creatures were to serve man's benefit and rule, and

land reclamation is man's commission to fulfil God's will. The course of the development of Western civilization changed man's relationship to the land significantly. Technology was a means of exploitation of natural resources efficiently, to save labour, and to harness natural power to serve man's occupation. Presumably, by at least the tenth century, people began to apply waterpower to industrial processes other than milling grain, and then by the turn of the 13th century, the windmill followed. The development of technology was an incarnation of man's mastery of nature.

At the same time, it was believed that all living things in the natural environment were created under man's will, and to study nature was to better understand God, which was called natural theology. Knowing how God's creation operates meant the revealing of God's divine mentality, and in this way, from the early 13th century onward, science developed in the Latin half of Christendom. As the 17th century set in, the system of the human body and the universe, such as the cyclical movement of celestial bodies, began to be understood by analogy of an elaborately designed great machine (Ikegami 1990: 184-186). Everything was believed to be explained from a mechanistic point of view, where qualitative laws governed the interaction of particles. In the late 17th and the first half of the 18th centuries, the presupposition of God was no longer necessary for many scientists. The Enlightenment movement renounced religious and traditional authorities and admired human reason, experience and the scientific understanding of nature. Descartes emphasised unaided reason, and based on his dualism, spirits were separated from matter, God from nature, and mind from body. Then, it was believed that study of the mere object (nature without God) would lead to the decisive control of nature for human ends (Taylor 1992).

Two different inventions by the Latin West, technology and science, were merged after the so-called Industrial Revolution (White 1968:75-94 [chapter 5]). The Industrial Revolution occurred in England during the late 18th century and spread to other European

countries in the first half of the 19th century. The improvement of technology dramatically transformed the European economic and social structures so that the modern capitalist economy was established, based in the urban areas in European countries, which increased people's standards of living, and progress was equated with the satisfaction of material wants. The Western supremacy in political and economic areas has prevailed all over the world, and modern science and technology, whether in India or Japan, are now definitely Occidental in terms of the form and the nature. Finally, in modern times, the consumer-oriented society was established.

4.2.2 The Rise of the Ecological Worldview

Opposing the utilitarian worldview, the contrasting worldview arose also from European thoughts, particularly English literary circles during the 17th and 18th centuries, when it became conspicuous. In the following section, I use wilderness and nature interchangeably.

In Christian dogmas, pristine nature – wilderness – is a place of desolation, where Christ wandered forty days to be tempted by the devil and Satan (*New Testament*, Matthew 4.1-11, Mark 1.12-13). Also, wilderness is a cursed ground where Adam and Eve were driven from the Garden (Milton 1993). The Bible and associated literatures emphasised the negative meaning of wilderness, and wilderness was the realm of antichrist (Tuan 1974:109-112). At the same time, wilderness was a place where hermits and ascetics went for discipline and contemplation. Even priests sometimes saw wilderness as a place for Christian retreat. In addition to this, animistic beliefs remaining in various parts of the Latin West before Christianity's dominance over other "pagan" contemporaries, added different views. Forests were still a place where spirit beings resided. These beliefs provided ambivalent images of wilderness (White 1968:75-94 [chapter 5]). Inhuman, animal-like spirit beings, such as centaurs and fauns, were believed to be the minions of

Satan on the one hand, but denizens of paradise on the other hand. All in all, the dominant image of wilderness was of a vast spread of an inhumane domain.

When transatlantic movement began, the image of wilderness was profoundly transformed. Although wilderness was an obstacle and a source of constant threat to their lives for the settlers, it evoked the sublime image of nature. "I thinke in all the world the like abundance is not to be found." – an English sea captain Arthur Barlowe, who first reached Virginia in 1854, wrote in his report with a sense of wonder at the incredible plenitude of life that he found (Farb et al. 1964:9). At the time when European settlers just arrived at the New World, lands were still filled with natural riches, which had already become hard to find in the Old World. Before long, such explorers' wonder turned into exploitation of immense natural resources, but people who had an influence of Romanticism, which had grown in European literary and philosophy circles, saw wilderness in a different way. They overthrew negative images of wilderness in the course of colonization.

First of all, the Puritan minister and philosopher Jonathan Edwards challenged environmentally oppressive Puritan attitudes towards nature that were prevalent in early European settlers in the New World (Dr. James Butler, a professor emeritus in the Department of Renewable Resources at the University of Alberta, unpublished manuscript). In the 1730s, he wrote of beauties of nature and how one could feel closer to God in remote natural places. He was influenced by the movement of European religious revolution, referred to as *Deism*. Deism is the doctrine of natural religion that emerged in England and France at the turn of the 18th century, which assures the existence of God but excludes additional revelation, dogma, or supernatural commerce with the deity (Blackburn 1996). That is, God may be thought of as an "absentee landlord." Later, Deism was transformed by Ralph Waldo Emerson's *Transcendentalism*, which sees the point of God in all of nature. Emerson (1991) published *Nature*, in which he appreciates the

profound relationship between nature and humanity, and his work became the precursor of Western environmental philosophy. Henry David Thoreau (1971) followed his philosophy and published *Walden*, which is a record of his solitary life in a forest in Massachusetts a mile away from all towns. The Romanticist movement was not confined to literature. As settlers were continuing to proceed westward at a rapid pace in North America, Asher Durrand, a landscapist, drew in 1849 an image of a "pristine" landscape of the Catskill Mountain near New York, called *Kindred Spirits*, depicting foliage of trees, rocks, and so forth with a lot of detail (Figure 4.1). The two figures standing on the hill in the painting are Thomas Cole, the father of the art movement known as the Hudson River school, and William Cull Bryant, the father of North American poetry. Both of them were concerned about the destruction of forests and lamented the gloomy future of wilderness.

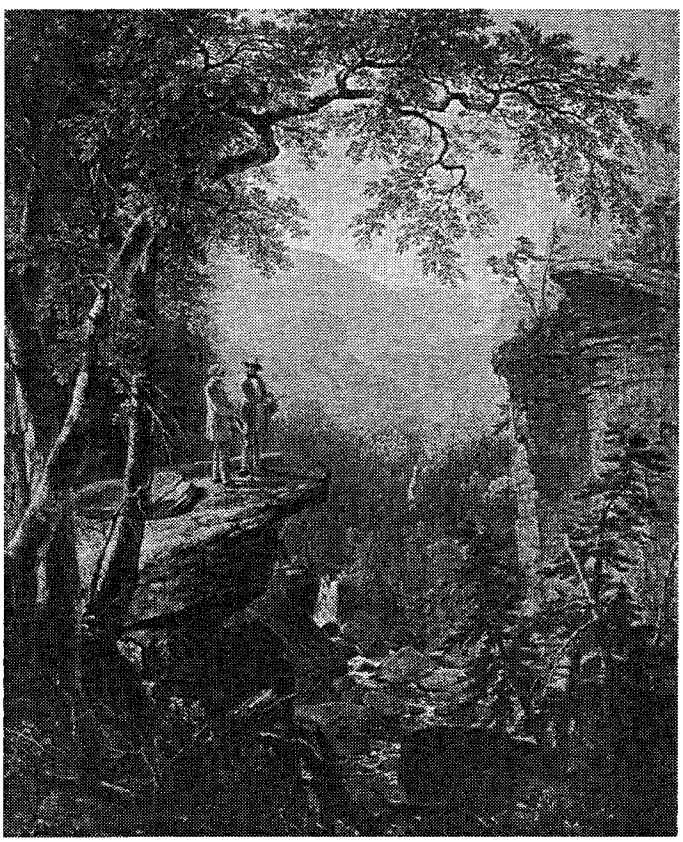

Figure 4.1. *Kindred Spirit* by Asher Durrand (1849) (cited from Dr. Newton's [n.d.] website)

The New World included a lot of unique, special, inspiring geographical features, such as great waterfalls, breathtaking cliffs, and gigantic rock walls. To romantic literary men and naturalists, these landscapes seemed to be "secluded," "un-trodden," "pristine" wilderness, and all shed a "sublime" aura. The *sublime* nature of big valleys, great chasms, and seemingly endless rugged mountaintops were endowed with sacred and spiritual values. They often went there to appreciate these landscapes, and felt supernatural emotions. It was John Muir who was the personification of this transatlantic Romantic Movement. He believed that these "pristine" landscapes must be *preserved.* He was impelled to see the first national park, the Yellowstone National Park, established in 1872. Muir was also concerned about the destruction of the sequoia forests in California due to European settlement rushing westward, and then the Kings Canyon, Sequoia, and Yosemite National Parks were established in 1890. Finally, Muir's devotion to nature preservation went to the foundation of the Sierra Club, a private environmental group, in 1892. Thus, the concept of national parks arose from preservation of "sublime" landscapes, which should be protected from any anthropogenic disturbance.

4.2.3 Conflicts between the Expansionist and Ecological Worldviews

I would here like to contrast these contesting viewpoints. According to expansionists, the subjective knower is separated from the objective known, facts are more important than values, and therefore the pursuit of more quantities, rather than qualities, becomes a principal aim. Consequently, this rationalization and mechanization of nature brought about the viewpoint that every natural phenomenon was to be forecastable and measurable, and things not being so were dismissed as irrational, instinctual, and emotional. Thus, this viewpoint immediately leads to the thought that wise use of nature would guarantee the seemingly endless development of human life, which is supported by scientific, industrial, materialistic technology.

On the contrary, from an ecological point of view, nature is intrinsically valuable, and each element is closely interrelated, and nature is never a set of discrete or isolated entities (Taylor 1992). They only accept a non-anthropocentric approach to nature. Thus, wilderness should be left untouched. Briefly stated in this context, wilderness should be: 1) large enough, 2) allowed no access (If people visit there, they must leave, not remaining there.), and 3) shaped only by natural forces (That is, artificial operations should be avoided, and if any, it must be as little as possible.) (Dr. James Butler, personal communication, 18 November 2003).

The end of the 19th century already saw these two different views of nature causing a conflict over forest policy of the United States between two prominent figures. The first, chief forester of the redefined U.S. Forest Service Gifford Pinchot, and a naturalist John Muir, both advocated nature protection, but their objectives of forest protection were strikingly different. On the one hand, Pinchot advocated *conserving* nature for future use. He believed that natural resources should 'provide the greatest good to the greatest number in the long run' (U.S. Department of Agriculture [USDA] Forest Service n.d.). In his mind, as long as humans wisely use the natural resources within the limit of resilience of nature, they could continuously exploit the resources in pursuit of their better lives. (However, a problem may be how we can define "the limit of resilience.") On the other hand, Muir repudiated Pinchot's utilitarian viewpoint of nature and strongly insisted on the importance of *preserving* wilderness and prohibition of any timber harvesting (Sierra Club n.d.). For Pinchot, just *preserving* wilderness did not make good sense. Whereas Pinchot's principles became the basis of U.S. forest policy, Muir's belief led to the foundation of the modern environmental movement. This is a good example of contrasting the ecological worldview with the expansionist worldview.

4.3 The Ecological Worldview Forming a Political Force

4.3.1 Before and After the Earth Summit

The remarkable intrusion of environmental concerns into the political arena was made in the 1970s. This section revolves around the United Nation Convention on Environment and Development (UNCED) at Rio de Janeiro (commonly known as *the Rio Earth Summit*) held in 1992.

Once the report titled *The Limits to Growth* was prepared by a MIT research team at the request of the Club of Rome in 1972, technological development that was thought to be infinite began to be doubted (Meadows et al. 1972). Using computer-based simulation models, this report predicted forthcoming human crises resulting from serious environmental degradation, the exponential growth in population in developing countries, and increasing military strength, which all would lead to the limits to economic growth. This subject was seriously discussed at a United Nation environmental conference in Stockholm (known as the *Stockholm conference*) in that year. In response to the Club of Rome's report, the United Nations General Assembly established the World Commission on Environment and Development (WCED) in 1982, and after five years' research, WCED produced the report *Our Common Future*, commonly known as the *Brundtland Report* (WCED 1987). What made this report important was that it provided what has become the popularised vision of "sustainable development" (SD), which to "meet the needs of the present generation without compromising the ability of future generations to meet their own needs" (WCED 1987:43). The concept of SD was so sensational that this phrase began to be widely used in many arenas, such as the economics, industry and environmental arenas. Finally, the notion of SD was adopted for the forest and forestry in the United Nation Convention on Environment and Development (UNCED) at Rio de Janeiro (commonly known as the *Rio Earth Summit*) in 1992. During the Rio Earth

Summit, Agenda 21 was approved in order to realize SD, which raised a wide variety of issues: chapter 3, combating poverty; chapter 5, changing consumption patterns; chapter 11, combating deforestation; chapter 24, the role of women for SD and; *chapter 26, the role of Indigenous people and their communities* (United Nation [UN] 2004). This agenda served as a cushion against the pessimistic predictions of the Rome Report and provided an amendment to the traditional thought of development. Up until now, there have been many discussions about the definition of SD, and suffice it to say that I believe that SD should aim at achieving ecological, economical and community sustainability.

4.3.2 Recognition of the Presence of Aboriginal People in Forestry

For Aboriginal Peoples all over the world, what was significant is that the presence of indigenous people in forest management was strongly acknowledged through the release of the Rio Declaration on Environment and Development (commonly known as the *Rio Declaration*) consisting of twenty-seven principles. Principle 22 states that:

> Indigenous people and their communities and other local communities have a vital role in environmental management and development [...]. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of [SD]. [UN 2000a]

Moreover, in the so-called *Forest Principles* (the formal name of it is the "Non-legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests.") issued in concert with the Rio Declaration, the following principles were included:

> Principle 5 (a): [Indigenous peoples'] land tenure arrangements which serve as incentives for the sustainable management of forests.
>
> Principle 12 (d): Appropriate indigenous capacity and local knowledge [TEK] regarding the conservation and [SD] of forests should [...] be recognized, respected,

> recorded, developed and, as appropriate, introduced in the implementation of programmes. Benefits arising from the utilization of indigenous knowledge [TEK] should therefore be equitably shared with such people. [UN 2000b]

In this way, it was acknowledged at the international level that the presence of forest-dependent Indigenous people, the importance of forests for them to maintain their culture and social well-being, and Aboriginal TEK would play an important role in maintaining ecological integrity of forests. In addition to this, following the UNCED statements, in the Convention on Biological Diversity (CBD), incorporation of Indigenous people and their TEK concerning nature in maintaining biodiversity was regarded as important. Thus, as environmentalism was rising at the global level, the support and the incorporation of Indigenous communities living in forests and their TEK were also internationally acknowledged. This fact is significant. As Higgins (1998) and Smith (1998) point out, whether or not an Aboriginal community uses these concepts depends on whether or not the community is ready to participate in those situations.

Responding to a growing international tendency for the creation of new forest management regimes, Canada released "Sustainable Forest: A Canadian Commitment" several months before the Earth Summit, and showed its national forest strategies in order to realize SFM at the national level (National Forest Strategy Steering Committee 1991). After the Earth Summit, Canada had to establish criteria and indicators (C&Is), which would show what were decisive factors to make more realistic the concept of SFM. The Steering Committee on Criteria and Indicators of Sustainable Forest Management of Canada's Forests was established by the Canadian Council of Forest Minister (CCFM), and the CCFM's *Defining Sustainable Forest Management: A Canadian Approach to Criteria and Indicators* was submitted in 1995. The CCFM is an organization of forest ministers from provinces and territories in order to exchange information on forests and forestry (Rousseau 2003). The CCFM recognizes forest-dependent communities including

Aboriginal peoples as important constituencies, and its tasks are to incorporate needs and concerns addressed by them into forest management. Criteria pertaining to Aboriginal peoples are included in C&Is: Criterion 6.1, the acknowledgement of Aboriginal and treaty rights, and Criterion 6.2, Participation by Aboriginal communities in SFM (CCFM 1995).

Having launched these C&Is, Canada was faced with the challenge as to how to develop them. Canada's forests are huge. They vary from the temperate rainforest on the Pacific coast, to the boreal forest in the Prairie Provinces, the Yukon and the Northwest Territories, and to the temperate broad-leafed forest in eastern Canada. Among them, there are many different types of forest-dependent communities. In order to reflect that local diversity, where different communities may have different needs and concerns, the Model Forest Network was established, and under each model forest, it was aimed to measure C&Is at the local level. In some model forests science-based research is carried out, and in other model forests, social factors to realize community-based forest management are sought after. The Little Red River Cree Nation (LRRCN) has twice applied for designation of their forest as a model forest of the Aboriginal communities, but unfortunately, their proposals were turned down each time (Webb 2005a). This is discussed in Chapter 6. Currently, Waswanipi, one of the James Bay Cree communities in Quebec, is designated as an Aboriginal Model Forest. When I visited the Indian reserve of Waswanipi during the period from 30 August to 1 September of 2004, as part of the excursion of the International Forestry Students' Symposium (IFSS) 2004 (held by the International Forestry Students Association [IFSA]), some of the community members explained that their forestry operations were monitored and investigated in order to seek factors that would lead to better Aboriginal community-based forestry.

The certification system is another product of growing environmental awareness and movement and has been developed and improved significantly since the middle of the 1990s. A growing number of people have begun to feel concern about the environment;

therefore, certified wood will satisfy consumers that their purchase has been logged and produced in ways that protect the integrity of forests and provide for the stability of forest-based communities. Certification is a tool of putting pressure through the marketplace on wood producers to demonstrate ecological, social and economic responsibility. There have been established various certification systems, and the basic idea behind them may be summarised in three points: 1) fully functioning ecosystems must be maintained both during and after timber logging, 2) ecosystem functioning must be protected at all times and at all scales ranging from stand to landscape levels, and 3) forest-based communities must have fair and legal access to and benefit from the forest close to them (Hammond and Hammond 1997). The third principle, of course, includes Aboriginal communities. The Forest Stewardship Council (FSC), the international certification organization, was established in Oaxaca, Mexico, to develop regional standards for the accreditation of certification organizations. Certification is discussed again in Chapter 6. In this way, the presence of Aboriginal communities in forestry circles has been also acknowledged at an institutional level.

4.4 A Chasm between an Environmental Awareness and Social Practices

4.4.1 Post-Industrial Culture

As discussed above, environmental awareness seems to have taken a firm hold on our societies. Recently, we can detect a hint of growing environmental concerns from everywhere in our daily life. For instance, once media coverage was given to a decline of tropical forests, people began having concerns about the waste of paper. Environment-conscious companies began to do more with recycled paper. Also, the climate change in the Arctic has made the headlines, warning that the rising temperatures have negative effects on the Arctic ecology and Aboriginal peoples' lifestyles. A growing concern has

stimulated governmental budgets to deal with this issue. Thus, discourses of environmental problems are flooding our everyday life.

While the nature conservation movement has extended to a global scale, a growing number of people have been heading for a leisure-oriented lifestyle, and in particular, outdoor recreation, such as hiking, canoeing and skiing, are becoming popular leisure activities among urban dwellers. More people prefer to spend their leisure time in the rural area – a rural wilderness. Tourism has been also a growing industry, and if joining a package tour, everyone can easily enjoy the beautiful natural scenery of soaring mountains, lakes and breathtaking waterfalls. It is certain that outdoor recreation has boomed on a large scale. However, what I should point out is that growing environmental awareness and the nature-oriented attitude look similar, but they are totally different.

In western Canada for example, Whitson (2001) explains that it is just since the 1960s and the 1970s that small-scale leisure activities, once only for the affluent, has widely spread to the middle-class segment of society. The causes of the change that he discusses are: 1) an increase in accessibility to rural areas and national parks, 2) improvement of outdoor clothes and equipment, and 3) a rise of standards of living, which made affordable expensive goods such as motor vehicles to get there and outdoor equipment to use there. Accordingly, spending in a rural wilderness on holidays has become part of the lifestyle of the urban middle classes. The Banff National Park, designated as a World Heritage site in 1985, is just a couple hours' drive from nearby metropolitan areas such as Calgary. Also, penetrating the mountain area between Lake Louise and Jasper, the Icefields Parkway brings more than four million people to the centre of the Canadian Rockies every year (Krakauer 1995). More convenient and comfortable recreational facilities and accommodations have been built up in these areas to meet recreational needs, and in return, this situation has fuelled the current outdoor recreation boom. The Okanagan Valley and the eastern slope of the Rockies are becoming

"playgrounds" of the urban centres (Whitson, 2001). Clearly, this boom has been supported by the materialistic urban-industrial society, an irony not appreciated by many ecological-worldview holders. It is doubly ironic that nature lovers, who see the essential unity of human life with the natural world, are being manipulated by the consumer-oriented society. Without comfortable outdoor clothes, sport utility vehicles, and money, few people could enjoy wilderness experiences. Following Wallace and Shields (1997), I here call this current situation – a shift in urban lifestyle – *post-industrial culture*. As the post-war boom (1948–73) passed by, once basic necessities of life were assured with a rise in standard of living, people began to desire a better quality of life. In the post-industrial era, people prefer things that look more natural and closer to nature and make them feel free from a confining urban, materialistic life.

4.4.2 The Sublime and the Frontier Myth – American Wilderness

I would again like to go back to the late 19th and the beginning of the twentieth centuries of the American post-frontier period when the environmental movement started. The above-mentioned post-industrial culture bears an uncanny resemblance to the spirit of the post-frontier time. According to Cronon (1995), it was the concept of the "frontier" that further propelled the establishment of national parks from the early 20th century onward. Merging with the "sublime" concept brought by the transatlantic Romantic Movement, the "frontierism" peculiar to the United States forged a cultural image of wilderness.

The industrialization of the late 19th century helped the final surge westward across the Great Plains. With the development of better farming implements, more lands were brought under cultivation at a faster pace than ever before, and finally, the 1890 census of the United States revealed that there was no longer a clear line of frontier. Once the long period of American expansion came to a close, however, people began to feel as if they had

lost something pure and something free. This sense of the vanishing frontier evoked nostalgia for a passing away of a wilderness lifestyle. In the early days of the frontier period, free lands were offered from the wilderness, many people re-discovered a "frontier freedom" for individuals, and men were real men with fortitude, bravery, and adventurous spirits. As the urban people began thinking of their industrial civilization based on cities and factories as confining, false, and artificial, the frontier looked freer, truer, and more natural in their minds. No one felt frontier nostalgia so deeply as the affluent, who most benefited from the urban-industrial capitalism. Thus, the frontier discourse was the bourgeois form of anti-modernism.

Unfortunately, American native peoples were totally absent from this perception. National parks were established after native peoples were swept away from their traditionally occupied lands and moved onto Indian Reservations. Muir (1909:28) even goes so far as stating that:

> When an excursion into the woods is proposed, all sorts of dangers are imagined, – snakes, bears, Indians. Yet it is far <u>safer</u> to wander in God's woods than to travel on black highways or to stay at home ... As to Indians, most of them are <u>dead or civilized into useless innocence</u>. [Underline added]

With removal of prior human habitation, wilderness became something like an "empty," "virgin," and "safe" landscape.

Thus, wilderness became the American version of the nation's sacred myth of origin (Cronon 1995). Wilderness itself cannot be sacred as such, and a wilderness landscape is a very cultural invention. As Tuan (1974) notes, the wording of *preserving* wilderness is itself oxymoronic. In other words, when urban people contemplate a "pristine" image of wilderness landscape, they are not actually seeing one. Presumably, they are lost in a reverie about somewhere far from their own place possibly of a long time ago. Whereas I recognize environmental thoughts developed from Europe (e.g., Germany),

I would here like to point out that the modern environmental movement has something in common with transatlantic romanticism and the post-frontier ideology of the United States. When we see a wilderness landscape or think of nature, we more or less share a sense of the passing away of "untouched" nature that was the same as the American frontier myth.

4.4.3 "True North Strong and Free" – Canada's Wilderness

Interestingly, an American view of the wilderness corresponds to a Canadian's perspective of the North – more precisely, that of southern Canadians. In the southern Canadian's view, the North, arguably north of the sixtieth parallel, is the frontier, the wilderness, and the "empty" space for them (Shields 1991:162-206 [chapter 4]). They evenly share an image of man's struggle against the cold, severe, and forbidding natural environment. When they think of the North, there are the 18th and 19th centuries' explorers in their mind, such as John Franklin (1786–1847), and pioneers who wrested a living from inhospitable, frozen, and harsh wilderness. Down to the early twentieth century, literary men such as Jack London (1876–1916) equated the notion of being a northern nation with man's toughness and supremacy (e.g. *The Call of the Wild* [1995]). These images immediately imply that the North is a signifier of truth, purity, freedom, power, strength, and spirit. As used in the national anthem, Canadian's orientation is "the True North Strong and Free." The presence of the North has been making a national foundation myth for Canadians. In addition to this, the North has another facet of having been an economic and resource frontier for southerners' profits. As discussed in the previous chapter, fur traders, lumberjacks, prospectors, and miners had travelled around the North since before the nation came into existence. Thus, the great white North has hotly been defined as mythical *heartland* for southern Canadians on the one hand, and on the other hand, the North has been a resource *hinterland* offering natural riches for southern Canadians (McCann 1998).

Table 4.1 Top ten largest cities in Canada

City	2001 Population	Polar Unit *
Toronto	4,682,897	No data
Montréal	3,426,350	45
Vancouver	1,986,965	35
Ottawa-Hull	1,063,664	n/d
Calgary	951,395	94
Edmonton	937,845	125
Québec	682,757	n/d
Winnipeg	671,274	111
Hamilton	662,401	n/d
London	432,451	n/d

All cities fall on census metropolises and the Near North**

(N.B.) The populations are based on Canada, Statistics Canada (2002), and as for the terms (*) Polar Unit and (**) Near North, refer to Hamelin (1978) in Section 4.4.2

I have stated *southern Canadians* instead of all Canadians. In reality, as of 2001 approximately 64 per cent of Canada's population cluster in metropolises in southern parts of Canada such as Toronto, Montréal, Ottawa, Vancouver, and so forth (Canada. Statistics Canada 2002; see Table 4.1). Particularly, over half of the national population are concentrated on so-called the Windsor-Quebec City corridor (Yeates 1991), which includes half (15/27) of what the census defines as *census metropolitan areas* (CMAs). This shows that more and more Canadians are becoming southern urban people.

Another statistics shows that the number of people who engage in the staples-based industries is no shrinking (Figure 4.2). As of 2003, the share of the employees of forestry, fishing, mining, and oil and gas accounts for no more than two per cent of Canada's total employment (Statistics Canada 2004). Even if the agriculture sector is taken into account, their share does not reach five per cent. Given that these economic activities take place in rural areas, where some of "nature" still remains, there are few people who actually live in places remote from urban centres. Moreover, the number of farmers has declined by

almost 30 per cent over sixteen years from 1987 to 2003, and the forestry sector also has a similar trend. In other words, people are becoming estranged from the natural environment on a daily basis.

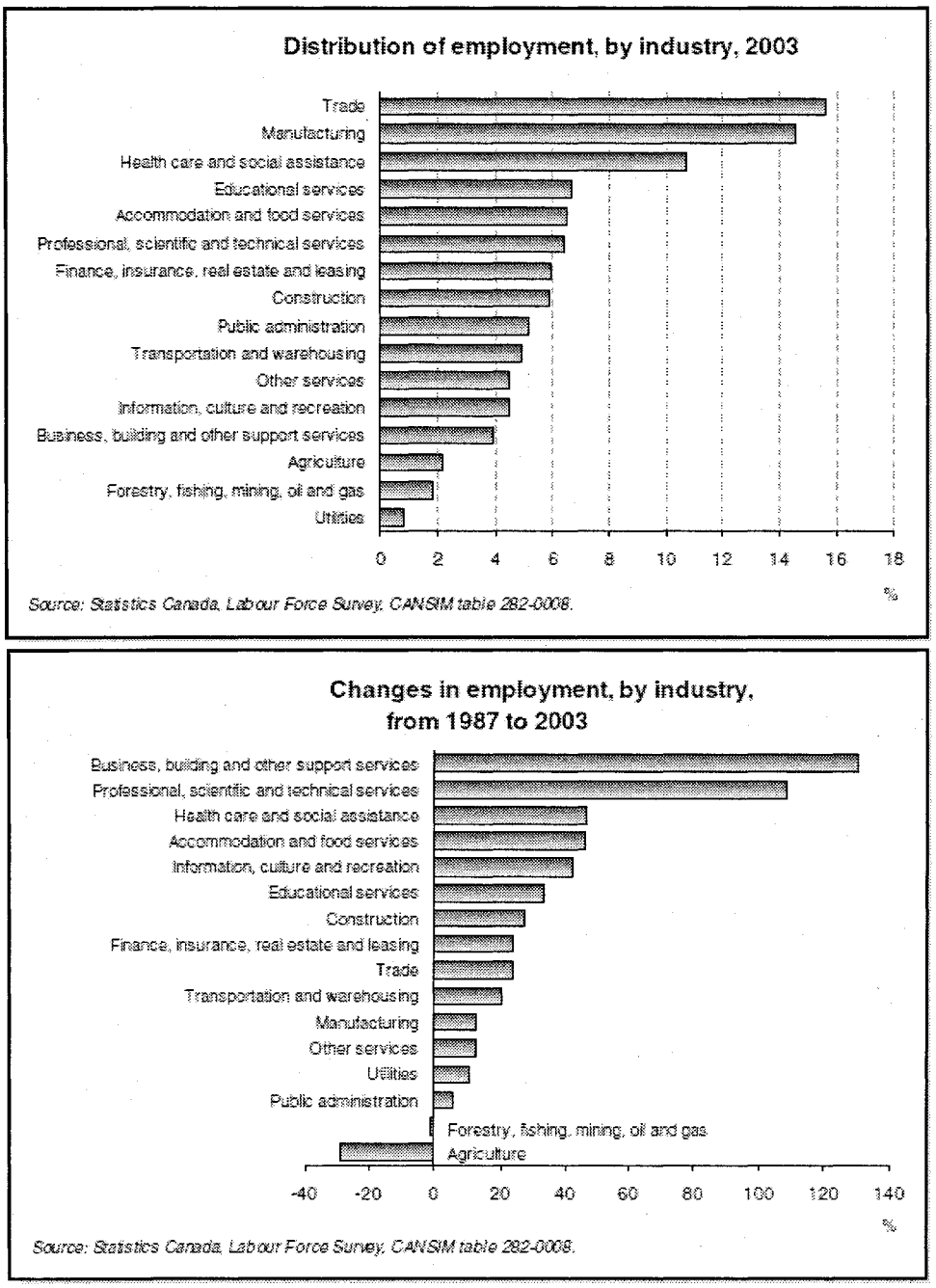

Figure 4.2. Distribution of employment (top) and change in employment (bottom) (cited from Canada's Labour Statistics Devision [2004])

Contrary to these demographic patterns, more and more people desire to have the feeling of being in the North, but only on a weekend or yearly holiday basis. As mentioned above, with an increase in standard of living, the wilderness area has become reduced to a recreational zone where everyone can visit on weekends or holidays. As Shields (1991:162-206 [chapter 4]) says, a visit to "recreational" wilderness is a pilgrimage to the Canadian psychic homeland and gives them a rite of passage, in which they are bestowed with a "real" northerner's status – being "strong and free."

Where is the North? What defines the boundary of the North? Louis-Edmond Hamelin, a Canadian geographer, constructed the term *Nordicity*, which shows how northern-like a certain place is in light of temperatures, natural vegetation cover, accessibility to other places, the population density, the degree of economic activity, and so forth (1978). Using ten selected variables, he calculated Canadian cities' Nordicity. Each value is decided on a scale from 0 to 100, and the total value should stay within polar units of 1000. He decides that the North Pole has 1000 *Polar Units* and values of the North should not be fewer than 200. According to Hamelin's Nordicity, Canada's land is divided into two: the Near North and the North, and the North is further classified into: Middle, Far, and Extreme Norths (Figure 4.3). For instance, Edmonton, Alberta, which boasts the title of "Liveable Winter City," is excluded from the North but is the northernmost metropolis in the Near North, gaining "125" Polar Units (Hamelin 1978:73). What should be stressed concerning Nordicity is that because of the social/economic factors included in Hamelin's variables, a value of a place's Nodicity can change. For instance, Whitehorse in the Yukon initially gained "553" Polar Units in 1880, which corresponds to a position in the Far North, but by 1966 the value dropped down to "283" (equivalent to a position in the Middle North) due to development of communication, trade and administration services (Hamelin 1978:34). That is, modernization of a place reduces its Nordicity and moves up the southern limit of the North. This is suggestive of the passing away of the Canadian

heartland. Again, it is essentially in this context that resource development in the North is condemned by some. For them, development is the violation of purity, a sacrilege of the heart of Canadians, and the exploitation of Canada's soul (Shields 1991:162-206 [chapter 4]). In effect, the feeling of being in the North brings them a privileged status.

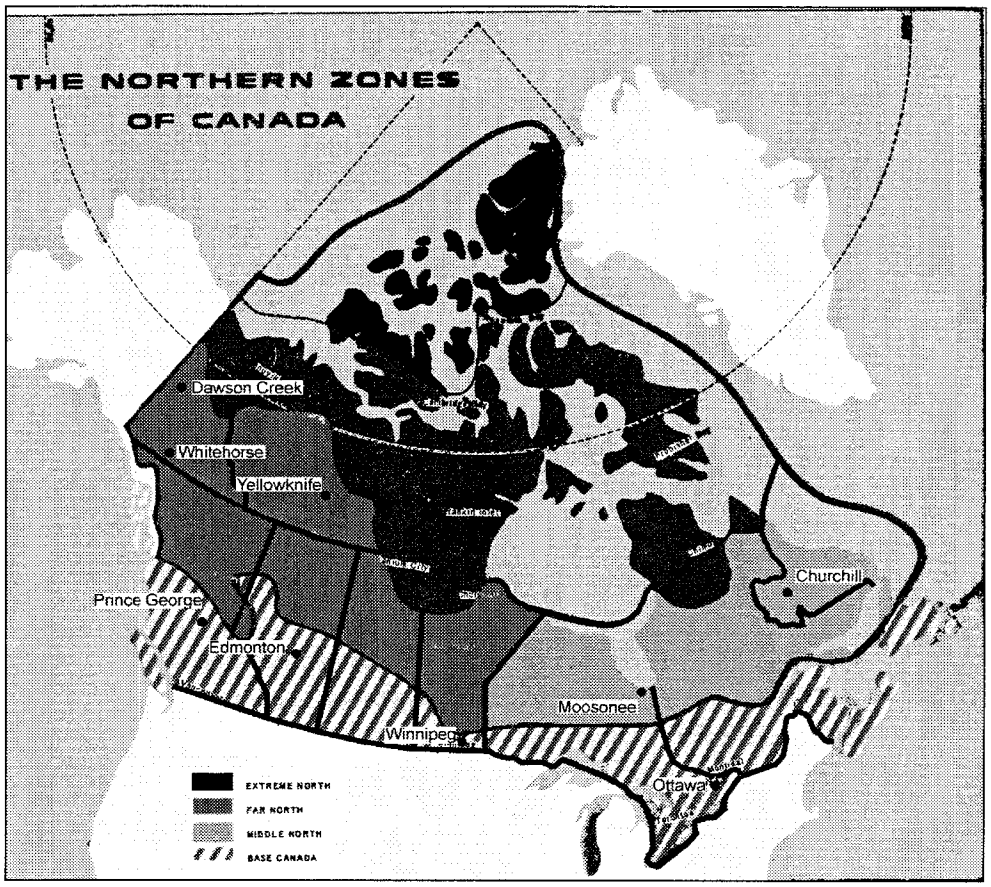

Figure 4.3. Hamelin's (1978:xiv) Nordicity map showing zones of "Extreme North," "Far North," "Middle North," and "Base Canada (Near North)"

4.4.4 A Sense of Place Devoid of Place

It is important to note that, as seen in the examples of the American wilderness and the Canadian North, when people discourse on nature, they are not actually seeing what they think. They live in urban-industrial areas of the States (Cronon 1995) and

contemplating about the North from southern Canada (Shields 1991:162-206 [chapter 4]). As for the Canadian North, this sense of place without substance hides the reality of the north – the poverty of northern cities, particularly Aboriginal communities, the susceptibility of rural towns to economic booms and busts, and a fact that natural resources extracted from the north are contributing to Canada's economy (Nuttall 2000).

Indeed, the economies of northern towns, for instance those in northern British Columbia, have been very unstable. A single resource-based industry such as large-scale forestry can either vault those towns into prominence or shatter them badly. Once a resource industry project is launched, mostly financed by foreign firms, a small town suddenly grows by drawing workers from the south, but once the project ends or becomes stagnant, a devastated town is left with wrecked mills and oil exploration rigs. Moreover, money, earned during the period of peace and prosperity is immediately repatriated to the south and does not remain in the North (Coates 2001). As for a demographic pattern of the North, retired, affluent Caucasians tend to move down to the south, and, for instance, populations of over 65 years old in northern British Columbia's towns consists of no more than seven per cent. This tendency is leading to the spatial polarization between the North and the south, in which more and more people are leaving to the south while making wilderness landscapes more marginalized. Aboriginal communities are simply left out of economic development plans in the North. It is said that more than eighty per cent of Canada's Aboriginal communities are located in forested areas (CCFM 1995), and with the Caucasians' demographic pattern taken into account, it should be clear that there is a growing polarity between Aboriginal and non-Aboriginal populations: Aboriginal communities in the North and non-Aboriginal communities in the south.

I believe that a sense of place devoid of place, or an image without substance, has made serious the problems associated with disputes between environmentalists and developers. When environmental groups protest development of oil and gas extraction,

clear-cut of forests, and construction of pipelines, usually they are not those who actually live there and earn their living from the land. Pratt and Urquhart (1994) and Urquhart (2001) studied two very large resource projects in northern Alberta, against which environmental groups had campaigns: "the world's largest single-line pulp mill" of Alberta-Pacific Forest Industries (Alpac), built in the Athabasca area, and the Cheviot mine, a gigantic open-pit coal mine in the Alberta Rockies. In these studies, they showed how much environmentalists downplayed the social, economic, and political forces that bring about industrial challenges to the environment in the rural societies. According to the studies, the main strategic problem lies in the lack of an appreciation of rural people's livelihood needs. Since environmentalists did not provide any alternative plans, which did take care of people who live in the immediate areas and was likely to offer economic growth in alternative forms, their opposition to the proposed mega-projects failed to convince developers and rural interests of "wise use." By only opposing the mega-projects, environmental groups did not notice that they would destroy the communities' livelihood if resource projects were rejected. On the other hand, developers did not relinquish their traditional thought that resource-based industry was the only way to bring about a good livelihood. In this way, when it comes to a conflict over resource development, neither side shows willingness to discuss the other side's concerns seriously and incorporate them into an alternative plan for securing a better living for rural communities. In addition to this kind of environmentalist to developer dispute, in the North of the economic hinterland, as discussed in the previous chapter, First Nations began claiming Aboriginal and treaty rights, making it more difficult to achieve non-Aboriginal communities' economic aspirations. It is beyond the scope of this study to discuss economic issues; however, what I stress is that a visionary image of place without substance can hide the reality of the place and people living there.

According to Wallace and Shields (1997), in the post-industrial period, a sense of

place devoid of place has not been confined only to the North. Urban people's consciousness, in concert with a shift in their lifestyle, sometimes takes hold in particular rural places so that these non-local people's affection for these places is mobilizing those places' social and economic conditions. For instance, the term *Cascadia*, named after the mountain range, refers to the Northwest coast in the United States and Canada, and the myth of Cascadia serves to evoke the scenic ocean vista, white beach, and the majestic temperate forest. The most famous representative is Clayoquot Sound. Creating a spatial myth, this area of scenic beauty has been drawing a number of people from all over the world. Moving to the east, the spatial myth has revitalized the economy of the South Shore and Annapolis Valley of Nova Scotia. Of course, the North still retains its power, such as northern Alberta of the vast-spreading boreal forest. Thus, urban people's affection for specific places are permeating beyond the city boundaries, provincial and national borders, carrying with them cultural symbols and moral values. This permeating external voice to the rural community in the post-industrial cultural movement seems to correspond to foreign direct investments (FDIs) to the rural economy in the economics arena.

Moreover, from time to time, their affection for place merges with sympathy to Aboriginal peoples. For instance, during the 1970s and the 1980s the Nuu-Chah-Nulth (Nootka) people ran a hard campaign against MacMillan Bloedel, which planned on harvesting in their traditional forest of Clayoquot Sound. The Aboriginal communities' claim drew much attention from environmentalists all over the world. In the United Kingdom, having threatened Scott Paper with running an advertising campaign saying the company was responsible for Canadian rainforest destruction, Greenpeace successfully drove Scott Paper to cancel its contract to purchase five million dollars' worth of pulp from MacMillan Bloedel (Pratt and Urquhart 1994:207-208). Another example of the boycott is the campaign conducted by the Toronto-based Friends of Lubicon, which was organised to appeal the injustice of Daishowa-Marubeni International Ltd. (DMI)'s harvesting in the

traditional forest of the Lubicon Cree, northern Alberta (Pratt and Urquhart 1994:125-126). Examples of the linkage of environmentalists and Aboriginal peoples are too many to enumerate. Thus, since the 1980s onward, the actors playing in the Canadian political economy are no longer confined to the traditional ones (the state, capital, labour), and environmentalists and Aboriginal peoples have become influential actors (Wallace and Shields 1997).

I add, however, that Aboriginal groups also have ambiguous feelings regarding environmental groups. Whereas Aboriginal peoples are mustering moral justice to enable them to use the natural environment with their close relationship to nature, sometime environmental groups become hostile to Aboriginal subsistence. For instance, seal hunting in the eastern Arctic has been strongly attacked by foreign environmental nongovernmental organizations (ENGOs), particularly in the 1980s. Animal rights activists (the French actress Brigitte Bardot is one of the famous ones) condemned baby seal hunting as a horrific massacre (Brigitte Bardot Foundation n.d.). The seal hunting that takes place in the Gulf of St. Lawrence to the Atlantic Ocean off Newfoundland has been opposed by many animal rights activists, in whose mind the livelihood of Aboriginal and rural communities are almost absent (Wattie 2005). This also occurs when Aboriginal business is from time to time denigrated by the mainstream society as being incompatible with a "true" image of accepted Aboriginal peoples. This imposition of the dominant society's cultural images is suggestive of cultural and environmental imperialism.

4.5 Conclusion

In this chapter, I have discussed the scope of the ecological worldview and its influence on society in contrast with the expansionist worldview. Under the expansionist worldview, all natural phenomena are divisible; therefore, man is separated from nature,

and man as the knower is believed to be able to know nature objectively and rationally. This thought led to the notion that man can control nature so that the riches of nature should provide the greatest good to the greatest number forever. Contrary to this wise use doctrine, the ecological worldview appreciates human's relatedness to the rest of the world. The ecological worldview has spread widely among modern society both in the individual and global levels. However, because the ecological worldview started linking with a romantic view of nature in the course of the passing away of frontier wilderness, it has taken a distorted form. A faraway place where people actually do not live or earn their living became something like a special, sublime and sacred place. The establishment of national parks in the United States in the post-frontier period and the presence of the North in Canada are good examples of this spatial myth. In Canada, and other industrially advanced countries as well to some extent, a sense of place devoid of place has been getting strengthened in concert with a shift in urban population's consciousness of lifestyle. This post-industrial culture has permeated beyond the boundaries of cities, borders of nations and spread all over the world, and rural communities have begun to be affected by multiple external voices. It has gone so far that environmentalism has become a social force to push and pull the direction of the political economy. We even see environmentalists actively claiming to establish nature conservation beyond national boundaries. I have discussed in the previous chapter that Aboriginal claims to their rights have begun to have an influence on resource development. In addition to legal justice, Aboriginal peoples have begun to muster moral justice from environmentalism due to their close relationship to the land. Thus, the post-industrial era has seen not only foreign investment, but also multiple external voices defending "nature," as well as both sympathy and antipathy to Aboriginal groups as urbanites have been drawn to specific rural places.

I also have discussed the problem associated with the spatial myth. Since a sense of "wild" places is devoid of substance, it can hide the reality of the place. People who

celebrate a wilderness are neither actually familiar with the place nor are they where they think they are. Why did this happen? After all, the ecological worldview has been a mirror image of the expansionist worldview, and both worldviews have the same route of Western thought. Taylor (1997) states how little Western thought has told us about what is actually "out there" in the landscape. The ecological worldview has been looking at remote wilderness with such eagerness that they have ignored the environment that is immediately surrounding them (Cronon 1995). Getting involved in the nearby environment means rediscovering the existence of living and non-living things actually being in front of one. The first step is taken from this attitude. Then one would know that not only remote nature but also one's mundane environment is certainly part of a tangled web of ecological relationships. A real ecological perspective would inform that a wilderness landscape and an everyday environment are both ends of the continuum. What needs to be emphasised is that the land use and management of local communities should be done from a local point of view. The next chapter deals with issues of how Aboriginal or local communities have nurtured their perspectives of their surrounding environment.

5. Making a Home in Nature

5.1 Introduction

Although any use of nature for human ends is suggestive of the destruction of the environment, people have been using environments for subsistence purposes for many thousands of years. In the following sections, I discuss people from three different forested areas as examples of the human-environment relationship: 1) the boreal forests of northern Alberta, 2) the tropical (monsoon) forests of India, and 3) the broad- leafed evergreen forests of western Japan (and deciduous forests of northeastern Japan). I believe that we could not reach an appropriate understanding of the nature-environment relationship without taking into account these kinds of examples. Incidentally, the people whom I introduce in this chapter are not confined to Aboriginal peoples. On the basis that they have lived closely to the environments surrounding them, I regard Aboriginal peoples and peoples belonging to local traditional communities as the same. The purpose of this chapter is to discuss how their traditional use of nature is different from the modern use of the environment.

5.2 Indian Burning in Northern Alberta

5.2.1 Modified Landscapes of North America

Wilderness landscapes mythicized by transatlantic romanticism and American frontierism in the colonial period were never virgin, untouched, and empty spaces. Before the earliest European explorers and settlers arrived in North America, the seemingly virgin wilderness had already been modified by Aboriginal peoples for millennia (Bonnicksen et al. 1999). Walking across the Bering Strait, Paleoindians continued pushing southward through an ice-free corridor and presumably along the Northwest coast at least twelve thousand years ago. Archaeological studies show that by

then they had burned forests, prairies and wetlands, cleared fields, hunted games, grown domesticated crops (Fiedel 1992). Kay (1995) argues that American native peoples must have been active fire users, based on fire history studies saying that forest stands of trembling aspen (*Populus tremuloides*) had burned repeatedly in the past although this species is hard to burn. What is called Indian burning or traditional burning has been found widely in North America including northern Alberta, Canada (e.g., Lewis 1982; Lewis and Ferguson 1988) and California in the United States (e.g., Lewis 1973). Other than in North America, it is reported that Aborigines in Australia and Tasmania have also practiced traditional burning (e.g., Jones 1969; Koyama 2002:5-42 [chapter 1]; Lewis 1989). A vast spread of grassland or prairies were actually products of Indian burning (Pyne 1982:66-122 [chapter 2]; 1997). Henry Lewis, an anthropologist, conducted extensive studies on Indian burning in northern Alberta. Following his articles, I concentrate my discussion on Indian burning in northern Alberta. I acknowledge that each Aboriginal group has a unique cultural form and a distinctive worldview so that Indian burning practices cannot be simply lumped together. However, given that their methods and philosophy are similar, I regard it as reasonable to use northern Alberta's case as a representative example of Indian burning.

5.2.2 Aboriginal Peoples in Northern Alberta

During the summers of 1975 through 1977, Lewis (1982) conducted interviews with 57 informants including Caucasians, Métis, and Aboriginal groups living in the zone from the Manning–Fort McMurray line up to the Hay River area (approximately 57–59N latitudes in northern Alberta, see Figure 1.1). By then, traditional burning practices were already prohibited by law, and those who remember this event were all late fifty to late seventies or older. The Aboriginal persons he interviewed were Slavey, Beaver, Chipewyan, and Cree. I review their historical background as follows.

The original inhabitants of northern Alberta were Athapaskan-speaking groups of Slavey (Dene), Beaver, and Sekani at least by the early 18th century. The introduction of the fur trade changed this Aboriginal composition. In the first half of the 18th century, the Algonquin-speaking Cree people, who had originally lived in the northern Ontario and James Bay area, began moving westward to the parkland (the prairie), seeking game animals and fur-bearers (Lewis 1982; Smith 1978). In the late 18th and the early 19th centuries, they further pushed into northern Alberta, displacing the original Aboriginal populations already there. At the same time, the Chipewyan, who widely moved around the northern forests of Manitoba and Saskatchewan for seasonal caribou hunting, migrated into northeastern Alberta, competing with and checking the Cree movements. As a consequence, Beaver and Slavey were pushed aside to northwestern Alberta, Cree and Chipewyan established their communities in northeastern Alberta. Sekani were eventually pushed into British Columbia.

5.2.3 Boreal Forest in Canada

Before taking a close look at Aboriginal burning in northern Alberta, I would like to make a few remarks concerning the boreal forest covering northern Alberta (which means approximately north of the 55th parallel) and its forest stand dynamics. Boreal forests of northern Alberta are part of a broad forest belt lying in the sub-arctic zone in North America, which stretches from the Mackenzie Mountains in Alaska eastward to the Atlantic Ocean (Johnson et al. 1995). It is bounded by the tree line in the north and by the aspen parkland biome in the south, which is a transitional zone to the prairie grasslands. Boreal forests covering northern Alberta, although there are detailed classifications of forest biomes, mostly fall into the *Boreal Mixedwood Ecoregion*, whereas a few parts of the forests at high altitudes are included in the *Boreal Subarctic Ecoregion* (Strong and Leggat 1992) (As for the term *Ecoregion* [i.e., representative

ecological areas] and the further information, see Table 6.3.). The Mixedwood boreal forests are primarily dominated by deciduous trees, such as aspen (*Populus tremuloides*) and balsam poplar (*P. balsamifera*), and successively by coniferous trees, such as balsam fir (*Abies balsamea*) and white spruce (*Picea glauca*). However, forest vegetations vary depending on climatic, hydrological and edaphic conditions. For instance, black spruce (*Picea mariana*) grows on poorly drained, cooler areas, and Jack pine (*Pinus banksiana*) appears on xeric, warmer sites. In the understory grow berries and shrubs including bunchberry (*Cornus canadensis*), common Labrador tea (*Ledum groenlandicum*), prickly rose (*Rosa acicularis*), fireweed (*Epilobium angustifolium*), and marsh reed grass (*Calamagrostis canadensis*). Thick mosses and lichens often cover the forest floor.

A forest does not stay in the same state and is continuously changing its physiognomy through dynamic developmental processes in the long term. Cleve and Viereck (1981) illustrate a developmental process, called *succession*, of boreal forest in Alaska following fire as follows (see Figure 5.1 on the next page). Just a few years after the removal of overstory and understory trees from the site, only grasses and mosses colonise the exposed area (stages I–II). A couple of decades later, shrubs such as willow and other broad-leafed trees begin to migrate to the site and establish themselves (stage III). Saplings of spruce have already grown under the shrubs, but for the next fifty years, fast-growing, shade-intolerant species such as birch and aspen are dominant (stages IV–V). Spruce trees are tolerant under the dark shade, so that in a hundred years they can catch up with the existing upper layers comprised of pioneering trees (stage VI). Finally, when two hundred years have passed after the fire, the site will turn into a mature (shade-tolerant) white spruce forest (stage VII). In this way, a variety of plant species migrate one after another, compete with each other, and establish (*ecesis*) and disappear through succession. In the classic Clements' (1916) theory, all forest stands finally approach the steady stage called *climax*, where shade-tolerant trees establish themselves

by driving away shade-intolerant trees; however, it has been said that a forest never ends up with following such a single scenario. Rather, through incessant disturbance and regeneration (re-vegetation), neighbouring forest stands affect each other, and stand dynamics make up a forest as a whole (Smith et al. 1997). Therefore, reflecting various local conditions (climatic, physiographic, and edaphic), a forest is an extensive formation of different successional stages and various vegetation types (Johnson et al. 1995). In addition to this formation of various forest stands, a boreal forest landscape is interspersed with numerous geographical features such as muskegs, rivers and creeks, hummocks and *openings*. Consequently, a mosaic of these various features provide a wide variety of habitats for wildlife.

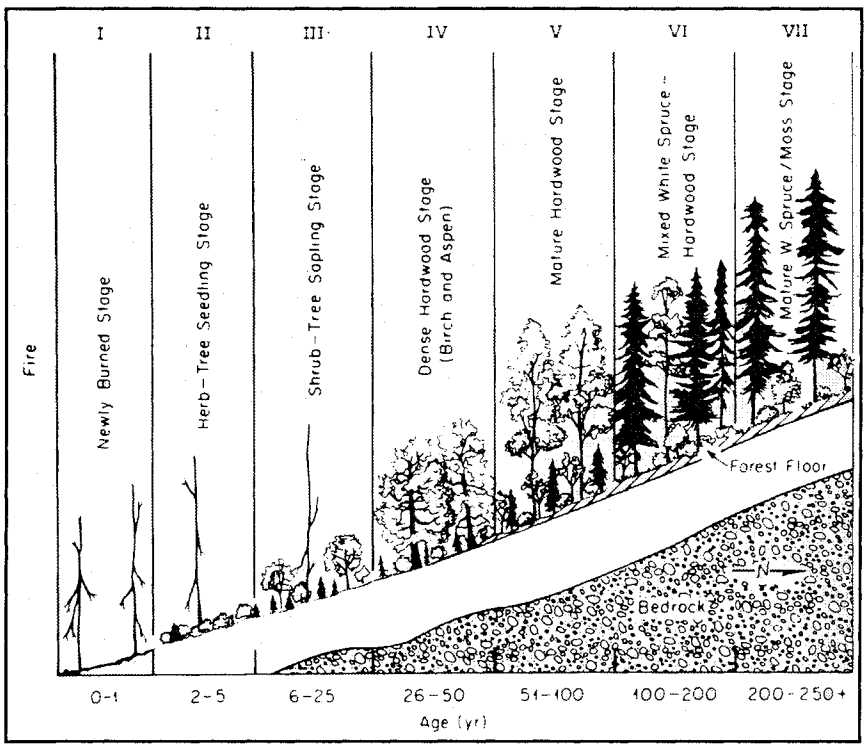

Figure 5.1. Upland white spruce succession after fire (based on Cleve and Viereck [1981:196])

5.2.4 Fire Adaptation

I have mentioned an *opening*. An opening is called a *gap* and is referred to as an area devoid of a canopy of trees with the bare forest floor and are created by natural disturbance, such as insect and disease outbreaks, floods, and windstorms. For two decades in forest science, it has been said that gap dynamics plays an important role in the promotion of forest succession (e.g., Whitmore 1984:16-19 [section 2.3], 75-80 [chapter 6]). The above-mentioned successional process is triggered by the creation of gaps. In boreal forests, fire is a decisive gap maker, which kills the existing trees on a large scale at once. Indeed, in northern Alberta, because of low precipitation and high moisture deficit, forest fires often occur, and frequent disturbances check the advance of forest succession and limit the extent of old-growth spruce-fir forest (Strong and Leggat 1992). Fire history studies show that, in Canada and Alaska, areas have burned at average 50-200-year intervals (Heinselman 1981). For instance, during the period from 1992 to 2001, Alberta had 5461 cases of lightning-caused fires, and if human- caused fires are added, 1.4 million hectares were burned these ten years (Alberta. Sustainable Resource Development 2002). The Peace River district, in the west side of northern Alberta, is ranked as "extreme" on the fire hazard map.

The high frequency of gap creation by fire is a primary driving force of forest succession. Recovery of boreal forest systems following fire is fast because fire promotes nutrient cycling. Low temperatures cause poor decomposition of organic matter, and build up a thick organic layer on the forest floor. Forest floor combustion decreases forest floor biomass and transfers minerals such as nitrogen (N), phosphorus (P) and potassium (K) to soil. A newly burned stand with dark ash raises soil temperatures. This encourages the surviving roots and tubers to burst out sprouts and suckers. Another reason that fire drives succession is that some trees such as jack pine, lodgepole pine (*Pinus contorta var. latifolia*), and black spruce (*Picea mariana*) are well

adapted to fire because their seeds never germinate until fire heats their cone scales (Johnson et al. 1995). Thus, the initial stage of succession following fire brings about high productivity of above-ground biomass, and plant species themselves are well adapted to fire.

Moreover, the early forest developmental process increases biological diversity of wildlife at the forest stand. Newly growing grasses, buds and shoots of trees attract herbivorous animals, such as rodents, muskrats, and moose (*Alces alces*). Consequently carnivorous fur-bearing animals begin to visit the stand, seeking mice and voles. Even black bear (*Ursus americanus*) appear in the fall to eat berries. Overlapping with each other, the edges of an opening and the surrounding forests make a transitional zone of two different plant communities, called an *ecotone*, and an ecotone becomes an important habitat for animals which use more than a single vegetation zone for mating, reproducing, and rearing. Also, burned lakeshores harbour fur-bearers such as American marten (*Martes americana*), fisher (*Martes pennanti*), Canada lynx (*Lynx canadensis*), coyote (*Canis latrans*), grey wolf (*Canis lupus*), red fox (*Vulpes vulpes*), and American beaver (*Castor canadensis*).

It should be clear that the early successional stage of a forest will make it easier for Aboriginal hunters and trappers to kill game. They empirically knew these natural consequences caused by fire. Then, in addition to lightning-caused fire, Aboriginal peoples themselves began to burn forests in order to make gaps, "reset" forest succession, and deliberately maintain the heterogeneous vegetation.

5.2.5 Place to Burn and Time to Burn

They were never indiscriminate in the burning of forests, nor were they insensitive to forest dynamics and changes in seasons. According to Lewis and Ferguson (1988:59-61), Aboriginal peoples in northern Alberta singled out and

maintained two types of early successional stages of forests with fire: *fire yards* and *fire corridors*. *Fire yards* are referred to as moderate spreads of openings or clearings, such as meadows, swales and lakeshores within the forested track. Usually the extent of it is up to several hectares (Lewis 1982). *Fire corridors* mean lineal areas 'similarly maintained [by burning] which make up the grass fringes of streams, sloughs, ridges, and trails' (Lewis and Ferguson 1988:61). Yards were used mainly for hunting, and corridors for trapping. All informants interviewed by Lewis (1982) believed that the burning of forests was good for forests and animals, and Aboriginal peoples as well, because they were well aware that following fire, new plants and new trees were coming out, and a new grove harboured a lot of animals. A Cree elder noted that there used to be a lot of *maskuta* (prairies) around there, but this was the past and now thick forests were surrounding their settlements (Lewis 1982:38). For them, meadows should have been maintained by fire. Other than that, they used to burn deadfalls and windfalls because they were 'not good places' for people because piles of dead trees may cause large, uncontrolled natural fires and outbreaks of pest insects and tree diseases (Lewis, 1982: 43). Also, piles of dead trees would hinder them from travelling through the bush and traplines. For purposes of fire precaution and the clearing of traplines and settlements, they also burned such sites. On the other hand, they had a lot of places not to burn. Black spruce forests were one of them. They usually appear on imperfectly drained sites, so that Aboriginal peoples were aware that plants did not grow very well on the sites if they burned them.

The time of burning was confined to the early spring. During this period, the top of the grasses was sufficiently dry, but standing trees were still wet to burn, so that fire did not go out of control. If a fire escaped, remaining snow and moist trees would prevent the spread of fire. They were well aware of the danger of fire through experiences of fire rampantly spreading in the dry summer. Some of Lewis' informants

recalled vividly how unpredictable, fast-growing, and destructive the summer fire was. From time to time, they burned late in the fall for the follow-ups, but only when burning conditions were not severe. The proper decision was the primary control against the spread of fire. Spring burning gave the plants a head start for their annual growth due to the increase of soil temperature, and made them grow up before the frost season came. In northern Alberta, the growing season is limited because of cooler temperatures. The remaining snow cover keeps cooler soil temperatures late in the spring, and low temperatures tend to make the plant-growing period short (average temperature through May to August, is just 13.5 degrees Celsius (Strong and Leggat 1992). In summary, Indian burning was part of the strategy of hunter-gatherers to modify their environment in a way that raised the productivity of forests in the long term. Their ways of using fire are based on substantially rationalized codes of behaviours, which were accumulated through a long time of experience and knowledge.

Those Aboriginal practices were never understood by the provincial government. Around 1910, having been worried about frequent forest fires in the province, the Alberta government passed a law to prohibit any sort of Indian burning practices (Lewis 1982). However, it was not Aboriginal people who caused disastrous fires. The causes were fires set up by Caucasian farmers and settlers to clear the land for farming in the most dangerous, dry summer season. Incidentally, campaign posters were put up all around northern Alberta, but it was not until the 1930s that the Alberta Forest Service was able to begin enforcing the law. Some Aboriginal trappers were still burning until around 1950 (the late Dr. Henry T. Lewis, a professor emeritus in the Department of Anthropology at the University of Alberta, e-mail message to author, 13 December 2002).

Ironically, forest fires have increasingly become serious since the government prohibited Indian burning. With the removal of regular burning, dead leaves and boughs built up into a litter layer on the forest floor. Such conditions have likely given rise to

uncontrolled forest fires when a fire has started from lightning or a careless man-caused fire. Therefore, recently, the government has decided to introduce prescribed burning under the supervision of forest scientists (Lewis 1982).

5.2.6 Social Relationship

I close this Indian burning section by discussing the linkages between burning practices and social relationships. I have mentioned that hunting subsistence still supports a substantial part of the family budget of northern Alberta (e.g., Nelson 2003). Also, it has been revealed that the Little Red River Cree Nation (LRRCN) still hope to maintain their hunting sites and traplines (Natcher and Hickey 2002). In the summer 2004, I personally met middle-aged hunters from the LRRCN at the Sulphur Lake area (approximately sixty kilometres northwest of Peace River, central western Alberta). They told me that they earned their living by working with the Little Red River Forestry Ltd. (the First Nation-owned company, see the next chapter), but using summer holidays when they became less busy, they hoped to continue hunting. They were taking their families and wanted to show them what hunting was like. In northern Alberta, an Aboriginal family teamed up with a couple of families in the past and hunted in the bush. Big game hunting required several hunters to co-operate. Meadows made by fire (fire yards) were communal sites and must have been managed communally. It was recorded that in James Bay Cree family hunting, the elder man who had the expertise in hunting and trapping became a *hunting boss* and *tallyman*, who took his hunters and trappers to proper hunting sites (e.g., Scott 1986). In a similar way, northern Alberta's Aboriginal communities may have been conducting co-operative hunting at fire yards under the direction of the elders. Through these kinds of practices, strategies, and techniques, the ecological knowledge necessary for hunting and trapping were passed on from one generation to the next. Some Cree hunters from the LRRCN vividly described their first

kill in the bush. They address their fear before the hunt and their pride in accomplishment after hunting (Pyc 1999). One elder says that the first kill is the first test of manhood. Another hunter described that "the connection to the moose would result in deeply embedded knowledge about the animal within the community" (Pyc 1999:5). As long as spring burning was closely connected to their subsistence activities, burning practices were deeply embedded in their societies.

On the other hand, fire corridors with the linear nature of traplines were individual or family unit domains (Lewis 1982). Traplines, which extended throughout the forest in a complicated manner, were owned by individuals or a family.* Lewis' informants told him that as their procurement declined in old traplines, they moved to newly burned traplines. Several years' use of traplines caused a decrease of animal population, so that they left them for some years for animals to go back. A similar strategy is found in the James Bay Cree's way of rotating traplines (e.g., Craik and Casgrain 1986; Feit 1987; Francis and Morantz 1983). Despite a complicated, moving trapline network, it is speculated that people recognized each other's traplines. They burned sloughs and creek sides on the way home from spring hunting for the preparation of the next trapping season (Lewis and Ferguson 1988). In burning traplines, they must have indicated their territories with each other. At the same time, the meandering lines of smoke rising from the forests must have made a landscape peculiar to the spring of northern Alberta, which signalled the turn of the seasons. With a ban on Indian burning and the imposition of a registered trapline system, which replaced the original distribution of traplines, northern Alberta's forest landscapes were substantially changed (see Section 6.3.2.).

Traditional burning practices were closely related to the seasonal cycle of subsistence activities and embedded in their social relationships. It can be speculated

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* However, one should bear in mind that these traplines were a European creation, not traditional.

that their hunting territories and traplines were forced to change after implementation of these legal constraints. To examine the effects of this prohibition would require further research.

5.3 Sacred groves of India

5.3.1 Shifting Cultivation in the Monsoon Tropical Rainforests of India

Traditional burning practices are not always confined to hunter-gatherers. Peoples of India have also been burning forests for many thousands of years, modifying forest vegetation in a dynamic manner. Their practices have been carried out in concert with shifting cultivation (or slash-and-burn agriculture), which originates in the pre-Vedic period's hunter-gatherer practices. A mosaic of various vegetations would provide rich habitats for game. As time passed by, people incorporated burning practices into crop growing practices. They empirically knew that fire brought about high productivity of the land. Shifting cultivation is widely distributed in the savannas of central India (Sasaki 1994). This practice is also popular in the tropical (monsoon) forests of the Western Ghats ranges, and many people are still dependent on shifting cultivation despite strict restrictions having been imposed on farmers during the British colonization period (e.g., Chandran 1998). People have cleared forests and have been growing sesames (e.g., gingili [*Sesamum indicum*], ricinus [*Ricinus* spp.]), pulses (e.g., black gram [*Vigna mungo*], pigeon pea [*Cytisus cajan*]) and millets (e.g., little millet [*Panicum miliare*]), which are also common domesticated crops in the savannas of central India.
Central India accounts for most of India's land and falls into the savannah type, a discussion of which may represent a more general picture of India's forested landscape; however, here, I shall concentrate my discussion on the zone of tropical (monsoon) forests running along both the northeast and west coasts: the Western Ghats and coastal

Orissa which is north of the Eastern Ghats (see Figure 5.2 on the next page). These two areas are subject to the monsoon wind system, which brings a large amount of rainfall and the heat in the summer season (from May to November). The monsoon blows from the southwest in the summer and reverses in the winter, producing stable high pressure above the continent; therefore, this makes for a marked distinction between the rainy and the dry seasons (Box and Fujiwara 2001). The warm and humid climate during the summer favours various kinds of tropical plants and trees. The presence of this marked seasonality contributes to the distribution of deciduous trees, which drop leaves in the dry season and possess leaves in the rainy season. Other than that, evergreen trees, such as *sal* (*Shorea robusta*) and bamboos, comprise South Asia's monsoon forests. Tropical plants grow fast. If people let them grow freely, rampant forests would finally swallow their fields and villages. Therefore, openings and forests must be maintained by humans in order to meet human ends.

Burning is an easy way of clearing dense tropical forests, which increases the soil temperature and wipes away competitive weeds, insect pests and diseases. However, weeds soon migrate to the cleared fields and cover them up. Then, people leave these fields and burn other forests, and the abandoned fields are fallowed for several years. Fast-growing species, such as deciduous trees like teak (*Tectona grandis*) and Indian rosewood (*Dalbergia latifolia*), migrate to the abandoned sites, and, just as discussed in the northern Alberta case, these trees mingle into the existing surrounding forests and create a mosaic structure of forests. Recently, shifting cultivation has been blamed for desertification, but this is not the case with the past practice, with less population pressure and less need for cash income. The fallow periods were much longer than they are today. Local communities have taken care of their forests based on traditional knowledge handed down from generation to generation.

In this way, people have repeatedly interfered in forest developmental processes;

however, there are forested tracts that have been strictly protected from any anthropogenic disturbance by local communities for centuries – sacred groves. I would like to discuss the human relation to the natural environment and issues of how people have developed this relationship.

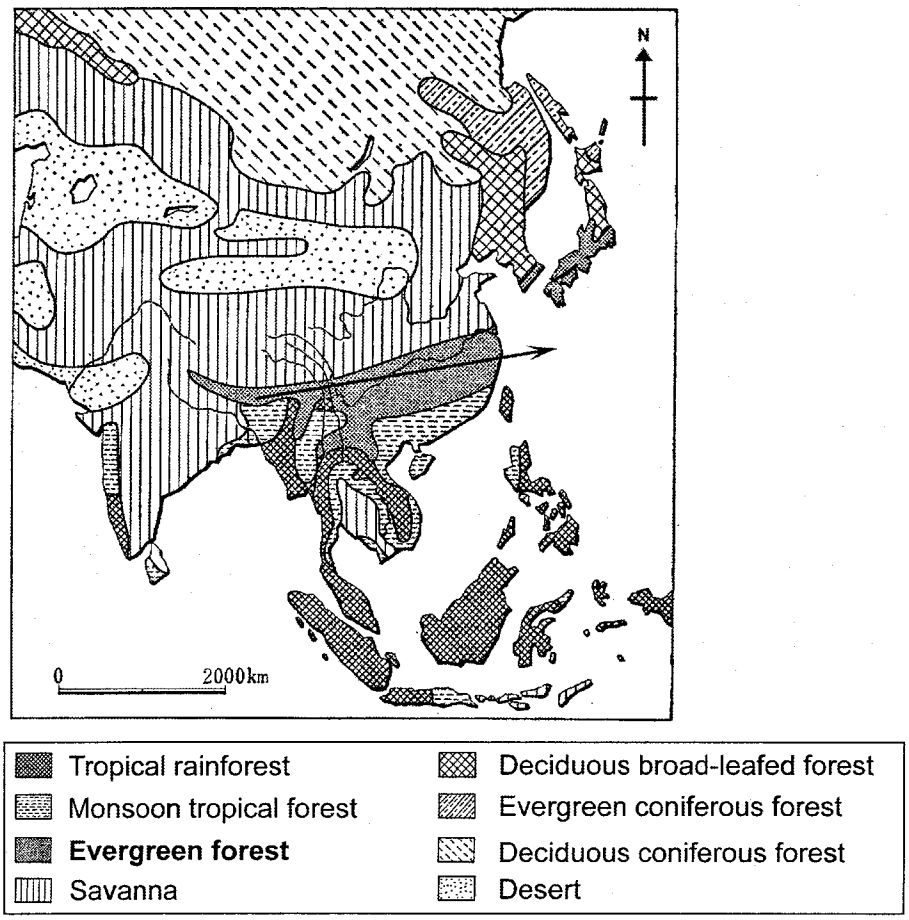

Figure 5.2. Classification of the East Asia's forests (based on Sasaki [1982:60]); the arrow shows the supposed route of the spread of the *East Asia Evergreen Forest Culture* (see Section 5.4.1)

5.3.2 Sacredness Brought about from Direct Engagement in Nature

Gadgil and Vartak's (1976) work is one of the earliest studies of sacred groves of India, and it examines dozens of groves protected by local communities for reasons of

local beliefs in the northern Western Ghats (Point 1 in Figure 5.3 shows their study area). Since then, many sacred groves have been "found" in various parts of the Western Ghats and nearby places (e.g., Chandrakanth and Romm 1991; Chandran 1998; Chandrashekara et al. 2002; Thamizoli 1997 [study areas shown at Points 3, 2, 4 and 5 in Figure 5.3 respectively]). Beyond the Western Ghats, many researches have been carried out in various parts of India such as north of the Eastern Ghats (e.g., Apffel-Marglin and Parajuli 2000; Pandy and Patnaik 1999 [Points 6 and 7 in Figure 5.3]) and in the eastern and western ends of the Himalayas (e.g., Khiewtam and Ramkrishnam 1989; Singh 1997 [Points 8 and 9 in Figure 5.3]).

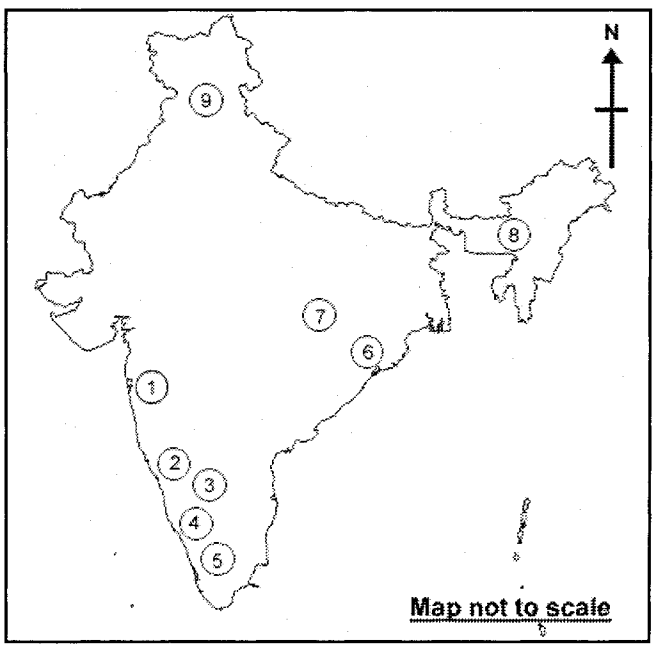

Figure 5.3. Sacred groves in India mentioned in the text.

The reason why sacred groves began to attract much attention from academic circles is that as the surrounding forests were being cut down at a faster pace, mainly because of commercial timber production and rural development, only sacred groves

were left untouched. Making a stark contrast with the surroundings, they grew to look like green islands floating in the midst of barren landscapes. These groves range from clumps of a few trees to more than twenty hectares of forests, and usually they stay within around 0.5 hectares in size.

Sacred groves are believed to be the abodes of deities. Consequently, the desecration of groves can never be allowed. The removal of anything, even dead wood and leaf litter from groves would lead to sacrilege of residing deities (e.g., Gadgil and Vartak 1976). Strict preservation by nearby communities assured fewer disturbances, and sacred groves have already reached an equilibrium state that is determined by climatic, physiographical, and edaphic conditions. With dense lofty evergreen trees and associated shrubs and herbs, biological diversity within the groves is very high. There often appear ecologically susceptible plants and valuable medical plants that are rarely seen in the surrounding areas due to the ecological degradation and exploitation. Liana and epiphytes are peculiar to sacred groves. These groves also harbour birds and animals, which may or may not be worshipped for religious reasons. Moreover, water wells up in springs all the year around, which provide an important water source for local communities although surrounding water sources have dried up due to desertification and soil erosion (Gadgil and Vartak 1976). Although declining in number due to the erosion of religious beliefs, not a few of sacred groves have still been protected for centuries with healthy ecological integrity. Many researches appraise high biological biodiversity of sacred groves that have been maintained by local communities for autochthonous beliefs.

In some sacred groves, reigning deities are male, but female deities are more common in most sacred groves (e.g., Chandrashekara et al. 2002). They have a delicate heart. Once aroused by the breaking of taboos, such as exploitation of timber and firewood, they become very furious about them and mete out illness, even death, to the offenders. In such cases, elders or religious leaders as representatives of the village,

must perform rituals to beg the deities' forgiveness. Rituals are often accompanied by sacrifice of an animal or animals. Villagers would not dare to disturb their forests for fear of ferocious punishment. On the other hand, the presence of deities in sacred groves give people moral support that they are protected from calamities, famine and diseases (e.g., Singh 1997). Sacred groves themselves are guardians of villages. These female deities with benevolent and malevolent characters are suggestive of the Mother Earth. With the climate preferable to plants (plenty of rainfall, warm temperatures, and marked seasonality), tropical forests are luxurious. Rampantly growing forests can invade onto human settlements. By continuously interrupting their developmental processes, people have wrested a living from the tropical forests. However, tropical forests have a fragile aspect. Once exposed to wind and sun, the tropical soil is prone to severe erosion. This can cause a degradation of people's living environment, natural disasters, and famine. While modifying and interfering with nature, people have never forgotten a reverence of nature and fear of nature's retaliation. Sacred groves are the natural environment onto which people's attitude towards nature have been projected. Here, it should be clear that the meaning of *sacredness* is totally different from the concept of national parks that was nurtured by the Romantic Movement and frontierism. For those who actually engage in nature, the concept of "sacredness" is brought about by used, nearby nature, instead of unused, indirect, remote wilderness landscapes.

5.3.3 A Sense of Unity with Nature

Apffel-Marglin and Parajuli (2000) report an annual festival called Raja Parba in coastal communities of Orissa, the northeast of the Eastern Ghats. This takes place in a sacred grove dedicated to the female Hindu deity *Bali Haracandi*, and is put on by nearby coastal small land holders and fishermen. Although these performers are Hindus, this festival draws many people from nearby villages irrespective of religion and ethnicity. A

substantial number of Muslims and Buddhists actually participate in Raja Parba. It is said that the belief of sacred groves is widely seen throughout India despite the diversity of ethnicity, religion, mode of subsistence and linguistic groups (e.g., Hinduism, Muslimism, Buddhism, and Christianity; slash-and-burn and paddy agriculture, fishing, and pastoralism). This is probably because the origin of sacred groves may date back to nature and ancestor worship during the pre-Vedic period (5,000–1,000 B.C.E.). The sun, moon, mountain, organisms, ancestor's souls and all objects can be worshipped.

The time of Raja Parba is set for the onset of the monsoon season and lasts four days. This period is a marked transition period from dry to wet seasons. Interestingly, the seasonal cycle is likened to women's menstruation. For those who engage in farming and fishing, the dry season is not suitable for their subsistence activities. However, once the monsoon season sets in, the fields and sea regain their fertility with plenty of rainfall, as if the goddess of the sacred grove celebrates the nearby communities. Villagers regard the dry season as the fallow period for the land and sea, just as women take a rest during their menses. Indeed, the first three days of the festival, men abstain from their subsistence activities because the land and sea are believed to be menstruating. They congregate in the grove, leaving women at each village, who are also supposed to be menstruating. Finally, on the last day, the land and sea, the deity, women and men – all go through purification through this ritual ceremony.

What needs to be stressed at this juncture is that by linking seasonal changes to the rhythm of women's menses, people feel a sense of unity with nature including the grove, the land and sea. During periods of change, all flesh, and even seasons, shift in states from the rest (non-productive) to the active (productive), and they are all purified after the ritual. Even non-living things, such as farming implements and carts, are said to be purified. The beginning of the rainy season is a sign from nature saying that nature is going through the transitional period together with people. This makes people feel

that they are closely tied with their natural environment. This sensibility is to be nurtured through quotidian practices in everyday life. As long as people do not feel sympathetic to things surrounding them, things remain just objects; however, once people perceive the presence of things with sympathy and intentionality, the things start entering their consciousness. The more people have consciousness of the environment, the more meanings nature gives back to them. The engagement with nature is made through this continuous dialectical communication with nature. Such phenomenological processes in everyday life give rise to a sense of unity with the environment. Ingold (2000:19) refers to this kind of nature-human relationship as "whole-organism-in-its-environment" or "one indivisible totality." For those who actually engage in nature, reverence and values are embedded in their community's landscapes, and humans and nature are never dividable.

This human-environment relation is in stark contrast to the Cartesian dichotomy, where mind is detached from object. When we consider the significance of sacred groves, the remark of Lynn White (1968) contains an interesting suggestion. As discussed in the previous chapter, White suspects that today's environmental problems are deeply rooted in the man-nature dichotomy of Christianity, which has developed science and technology:

> I personally doubt that disastrous ecologic backlash can be avoided simply by applying to our problems more science and more technology. Our science and technology have grown out of Christian attitudes toward man's relation to nature. [...] To a Christian a tree can be no more than a physical fact. The whole concept of the sacred grove is alien to Christianity and to the ethos of the West. For nearly two millennia Christian missionaries have been chopping down sacred groves, which are idolatrous because they assume spirit in nature. [White 1968:90]

Modern science and technology tends to be done with only what is given, seen, and measurable. Results of this attitude towards the environment have already been

expressed as an impasse of utilitarianism. This attitude seems only to widen the gap between man and nature. Landscapes of sacred groves suggest that it is necessary to move away from the straightforward perspective and incorporate wider viewpoints.

5.4 Japanese Traditional Rural Landscapes

5.4.1 Reverence of Mountain Forests in Japan

The human-nature relationship, which is shaped by the continuous process of people's perception of nature and the direct engagement with nature, as described above, is also supported by the human ties within the community. Given that lived experience of nature is the warp that weaves the human-nature relationship, this people-people relationship is the weft. In this section, taking Japanese traditional village landscapes as an example, I discuss how folk logic within a village has shaped people's perspective of nature.

The notion of sacred groves is found in Japan, just as in India. Small groves built near village shrines, called *chinju-no-mori* (the groves of the village shrine where deities and *genius loci* reside), are ones that have been sustained for centuries. Before Buddhism was introduced, nature and ancestor worship was dominant in Japan, and each local community worshipped autochthonous deities. A shrine was built in a place that would embody an ethos of the locality and where community members could feel the guardianship of *kami*, or spirit beings residing in creatures and things, and their ancestors' souls (Sonoda 1994). Since *kami* (these deities in Japanese) are believed to dwell in groves surrounding the shrines, they have been strictly preserved for a long time. Even through Buddhism spread throughout Japan from the sixth century onward, by amalgamating with Buddhism those local beliefs have survived, and remain in the everyday life of local communities in the form of folk belief (Takatori 1993). Shintoism

in a broad sense includes those folk beliefs and laid the moral foundation of local villages by the Edo era (starting in the early 17th century).

Though remote countries, India and Japan have worship of forests in common, and one of the reasons seems to lie in the diffusion of slash-and-burn cultivation and associated domesticated crops in the East Asia (Nakao 1966; Ueyama 1969; Ueyama et al. 1976). The practice of growing millets such as foxtail millet (*Setaria italica*) and proso millet (*Panicum miliaceum*) had originally developed in the savannas of central India and the monsoon zone of the Assam region, and then these crops were transmitted eastward together with tubers, such as taro (*Colocasia esculenta*) and yams (*Dioscorea* spp.), from tropical rainforests of Southeast Asia. At least by the latter part of the Jomon era (3,000–2,000 B.C.E.), Japanese had already started growing these crops based on slash-and-burn cultivation. At that time, channels of transmission were concentrated on a long belt composed of evergreen broad-leafed forests, stretching from the southeastern slope of the Himalayas and the Assam area eastward to the Yunnan in China, to the area south of the Yangtze, and to southwestern Japan within the Temperate Zone (see Figure 5.2). In the course of the spreading of those crops, diverse ethnic groups in the evergreen belt shared a lot of cultural elements (first termed by Nakao [1966] as the *East Asia Evergreen Forest Culture*) including food and material cultures, ritual ceremony, religious belief, and mythology (Sasaki 1982). One of them is the notion of human souls coming from mountains and returning to them when people die. In this sense, mountains were the link between human and deities (spirit beings). Mountains and forests were worshipped as the place of ancestors' souls and deities residing in the locality. This is the case in the very mountainous country, Japan, where mountainous terrains account for two-thirds of the total land. For Japanese, the words *yama* (mountain) and *mori* (or *hayashi*) (forest) are almost synonymous because forests grow in the mountains. Many Japanese villages have developed in the mountains. In Japan, mountains have played an

important role not only in people's subsistence, but also in the formation of their spiritual, moral backbone (e.g., Knight 1996).

As to the subsistence aspect, mountain forests provided habitats for a wide variety of wild plants and animals, which eventually enriched villagers' sustenance and material life. Rice cultivation was brought to Japan by the end of the Jomon era (at least by the second century B.C.E.), and this new mode of production was superimposed on subsistence activity formed by slash-and-burn cultivation (Sasaki 1982). Despite the popularisation of rice agriculture, burning practices were still carried out mostly in western Japan, and slash-and-burn cultivation survived until only recently (approximately until fifty years ago) (Ichikawa 1992:97-102; Moriyama 1988:118-121). After fire, in western Japan for instance, deciduous oak (e.g., *Q. serrata*; *Q. acutissima*) and alder (e.g., *Alnus japonica*) mingle with the original vegetation of evergreen oak (e.g., *Quercus myrsinaefolia*; *Castanopsis cuspdata var. Sieboldii*). Besides burning, people cut down trees for firewood, cleared the forest floor for the collection of dead leaves and branches, which was used as fertilizers. In this way, burning and interrupting the development process, Japanese had been modifying forest landscapes for centuries. As a consequence, mosaic forest landscapes burgeoned throughout Japanese mountains close to human settlements, particularly in western Japan. Moreover, those mountain landscapes girding villages were interspersed with grasslands, creeks and ponds, and sacred groves beside shrines. These geographical features and ecological patches are integral parts of what is now called *sato yama* (village mountains), a traditional landscape in rural Japan (Figure 5.4). A *sato-yama* landscape provides high biological diversity and social amenity as well. (Owing to the termination of burning practice, *sato-yama* landscapes are declining these days, but there has been a growing movement for their restoration in Japan [Moriyama 1997; Washitani 2001].) Surrounded by such mountain landscape, peasants (later farmers) have been tilling fields for two millennia with the blessing of nature.

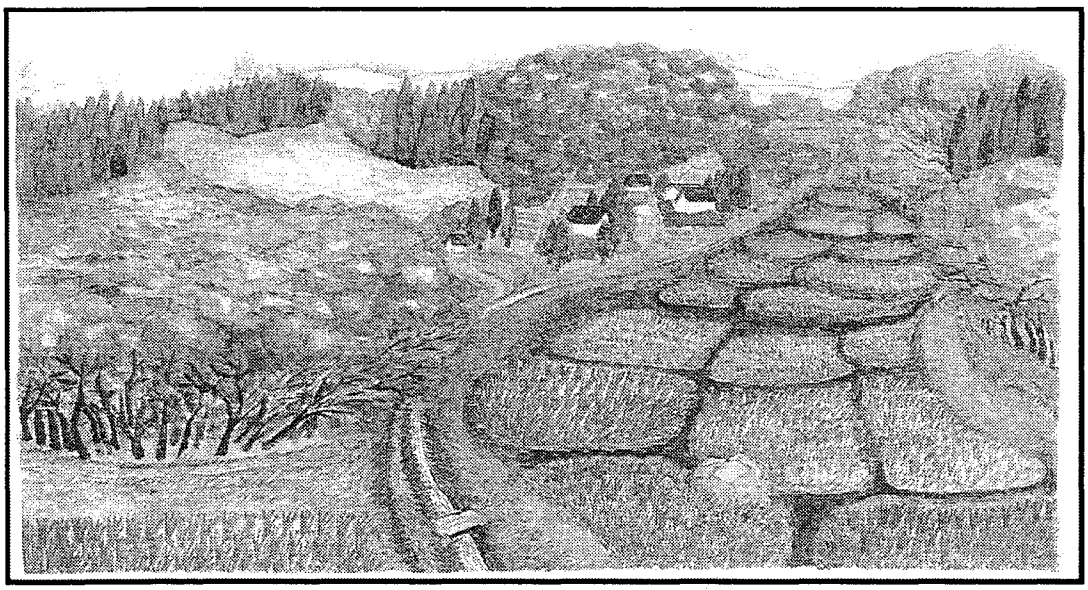

Figure 5.4. *Sato Yama* (village mountains), a traditional landscape in rural Japan: A mosaic of patches of forests, grasslands, ponds, and creeks, which were arranged around a village with paddies and other farmlands (cited from Washitani [2001])

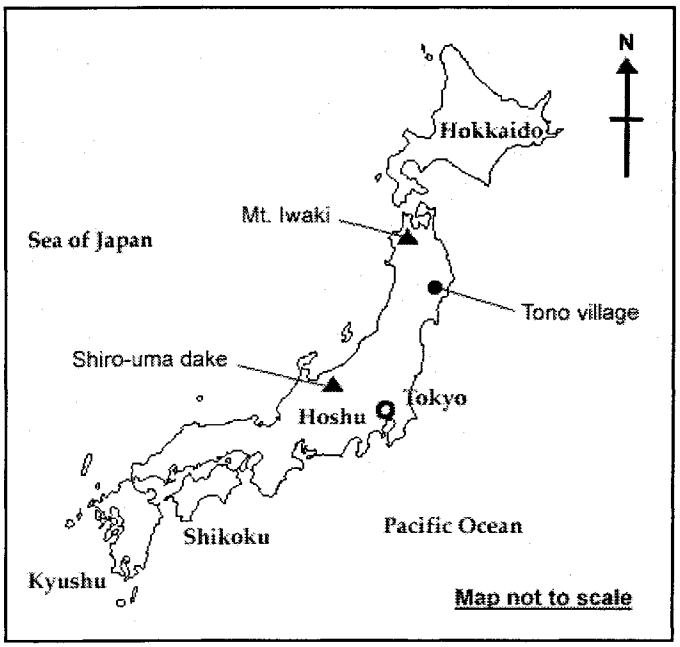

Figure 5.5. Japan, showing place names mentioned in the text

Although *yama* (mountain) was closely connected with villager's lifestyle, *yama* was not always a human domain. For example, the founder of Japanese folklore Kunio

Yanagita (1992) described in 1909 that people from the remote mountain village of Tono, northeastern Japan (Figure 5.5; however this area falls within the zone of deciduous broad-leafed forests, see Figure 5.2), states that they all had incomprehensible, awful, frightening experiences in the mountains. They share with each other fears for something scary arising from invisible forces when they were in the mountains. Particularly, their fears of death in the mountains were significant. Their fears for nature were expressed often in various discourses saying that they encountered inhuman creatures and ferocious animals in *yama*. Ghost-like strangers haunted, ferocious old wolves and bears scared them, and mischievous monkeys and foxes with magic shuttled between human and spiritual domains.

Nevertheless, villagers did not draw a dualistic distinction between human and nature, nor relegate associated inhuman and animal-like creatures to demons or brutes. Rather, those bizarre, inhuman creatures were deified by the villagers as *yama kami*, or mountain spirit beings. *Yama* was believed to be a home of *kami*, or ancestors' souls and deities. As long as the people kept reverence for *kami* that resided in animals, forests, creeks, and everything from nature and showed respect for them, *kami* were believed to guard villagers, although *kami* from time to time did haunt people. Thus, *yama* was an ambivalent domain where human beings could feel the presence of spirit beings.

The world of the Tono villages was supported by this kind of folk beliefs. As Wakita (1999) points out concerning Tono villages, Japanese villagers were closely connected to mountains through reverence for *kami* in nature and the fear of death. Living in a village surrounded by mountains, the villagers believed that their souls would return to the mountains, where their ancestors' souls dwell, after they die. When looking up at the mountains from their paddy fields, the villagers recognized their historical continuity between the past and the present.

5.4.2 Yuki-Gata Landscapes Reflecting the Human Relationship

While *yama* was the interface between the human and inhuman domains, *mura* (*village*) was completely the social sphere of community members, where folk logic prevailed from top to bottom. Unlike today's cities and towns, a traditional village was formed on a small scale; therefore, it was necessary for *mura* members to make their human relationships smooth on an everyday basis. I discuss below the concept of *yuki-gata* as a means of this end.

Rice agriculture brought from the continent significantly improved Japanese dietary life and supported Japanese culture as well, but this mode of production required a lot of time, effort and artisanal skills. Early spring is one of the busiest seasons, when farmers transplant rice seedlings from nursery beds to paddy fields. For its preparation, paddies needed to be ploughed up more than once (*ta-uchi*), and then still after irrigation, *ta-kaki* or further ploughing was needed. Villagers have to do all the steps before they reach the proper time of transplanting. Moreover, they had to judge the proper timing of rice transplanting because rice plants are susceptible to cold temperatures. Wrong judgements of the planting time would cause damage from late frost, insect and disease pests, and a bad harvest. Therefore, rice agriculture requires the subtle sensibility of seasonal changes.

Villagers in snowy regions had acquired a good signal or signals through long-standing observation of seasonal changes in *sato-yama* landscapes. For instance, there is a mountain called *Shiro-uma dake* in central Japan (see Figure 5.5). *Shiro* and *uma* mean *paddy field* and *horse* respectively (and *dake* means mountain). When it thaws, the snow on the mountain slopes starts to melt. Then, at the very time of rice transplanting, the remaining snow forms a snow patch that looks like a giant white horse lying on the slopes (Shirasaka 1992). This kind of a snow patch is now called *yuki-gata* (snow-shape). Thus, *yuki-gata* would inform villagers of the coming of spring,

contrasting the white of the snow with the black of the mountain surface.

Mountains with *yuki-gata* are widely distributed across Japan. As a mountain photographer Yukiko Tabuchi notes (Muroya n.d.), there are 131 mountains with 311 *yuki-gata* in various parts of Japan (Tabuchi 1981). Different places have different patterns of *yuki-gata*, such as persons doing farming works, animals, plants, farming implements, letters and characters, and so forth. For instance, as Kunihiko Uchida, a folklorist, notes (Muroya n.d.), when a snow patch on the slope of Mt. Iwaki in northeastern Japan looks like a horse with a plough, it indicates proper time for *ta-kaki*, *yuki-gata* of an old man and a old woman carrying a plough signals the time of *ta-uchi* (1929) (see Figure 5.5). Also, the shape of an old man taking rice seedlings and a woman carrying them with a basket synchronizes with the timing of rice- transplanting. Thus, the villagers at the foot of Mt. Iwaki have been able to distinguish as many as twenty-four shapes of *yuki-gata*, and each *yuki-gata* is closely connected to the agricultural calendar.

However, these *yuki-gata* cannot be recognized easily by the outside people. In fact, as Uchida (1929) confesses (Muroya n.d.), some shapes of *yuki-gata* were very difficult to recognize, even though Uchida was informed of those patterns by the villagers. A folklorist Masao Takatori throws into question the objectivity of the synchronization between this natural phenomenon and the time of agricultural works, asking who can determine the time when the melting snow has exactly become the shape of a horse (Takatori 1995). Takatori compares it with mundane experiences as a child says, "Dad, Look at that cloud! Looks like a plane!" That cloud which looked like a plane to one person could actually seem like a whale or something else to others. These kinds of traditional ecological knowledge (TEK) are not to be understood superficially by outsiders.

As Takatori (1995) argues, *yuki-gata* was a kind of safety valve of *mura*, a means of

relaxing the tension that would be built up in a communal life of a *mura*, so that they could reach agreement within a community. *Mura* was a small world where villagers had lived for generations. Everyone knew each other. If a conflict happened, the bad atmosphere would last for a long time. Therefore, liking their feelings to concrete objects, precedents, and past experiences were the best ways to reach agreement within the community. They needed to avoid troubles and unite their feelings. In the case of a white horse *yuki-gata* for example, one can explain it as follows. Having had a long winter, the villagers begin to hope the spring would come soon. Seeing the changing landscape, people detect a hint of the spring approaching them. When someone speaks out about it, other people begin thinking if their words are true. While people are doing such things, the snow on the mountain starts melting. Looking at the changing snow patch, people are gradually convinced that the turn of the seasons seems real. Expectations grow among the community, and finally, when everyone can agree that spring has come, the snow patch is only then recognized as a white horse.

In order to sustain the autonomy of *mura* community, a sense of solidarity was needed among the community members. The notion of a *yuki-gata* landscape is a good example that was used to instil harmony within the village. *Yuki-gata* landscapes can be interpreted as TEK by the outside community. However, this is never understood without holistic considerations of this kind of folk logic. Social structure, cultural background, and belief system – all are embedded in a community's landscape (and long-standing knowledge as well). Their traditional knowledge cannot be picked out from the socio-cultural context.

5.5 Conclusion

Drawing on three concrete examples (Indian burning in northern Alberta, sacred

groves of India, and Japanese traditional rural landscapes), I have discussed people's relationship to natural environments. In the course of my argument, it should become clear that to live actually in a certain place is to modify its environment. What I have called "Forest People" (see Chapter 1) are people who have modified *their* environment. For centuries, people have been burning forests, interrupting the developmental processes of these forests, and making up *their* landscapes. Although pristine, untouched natural environments could provide natural riches, modified environments are much better than in doing so. By actively modifying nature, people have been given the blessings of nature. Thus, I would most like to stress is that to live with nature means touching, using, and modifying the environment.

However, those modifications of the natural environments were never unilateral destructions of nature. Rather, showing reverence for nature, feeling fears for nature, people have lived together with nature. Reverence, respect, awe, and fear were the basis of their lifestyle. People who have actually made their home in their environment were well aware of the subtlety and fragility of nature, and its harshness as well. People have learned these things through continuous direct engagement with nature. Those lived experiences have shaped man's attitude towards nature and tightened human relationships within communities. In return, people have projected their values of nature onto the landscapes surrounding them. Knowledge, wisdom, mythology, and belief systems are embedded in their landscapes. Therefore, another point to be stressed is that to engage in nature is to become part of the environment. It is not until by doing so that nature becomes *their* environment. Finally, when we think of a local, Aboriginal community and its culture, we should never forget about these points that I have raised in this section.

6. First Nations Vying For a Better Position with the Mainstream Society

6.1 Introduction

I have finally reached Aboriginal forestry in the form of co-management that involves the provincial government, First Nations, and forest corporations. Because Aboriginal forestry is multi-faceted, what I have discussed so far – a long history of an Aboriginal relationship to the Crown the mainstream society, Aboriginal and treaty rights, environmental movement, and perspectives of those who actually make a home in nature towards nature – all relate to this chapter's theme. Northern Alberta has a relatively short history of settlement and industrial development compared to the Maritimes and eastern Canada, but what happened there similarly occurred in northern Alberta from the turn of the twentieth century. Focusing on northern Alberta, I discuss in this chapter how natural resource extraction made inroads into the First Nations' forests of traditional use, how the First Nations have been defending their livelihood for a century, and what they have been creating for a new social, cultural, and political realm.

6.2 Setting of the Study Site

6.2.1 Location and Population

The setting of this chapter is the lower Peace River country of northwestern Alberta, which is home to the Little Red River Cree Nation (henceforth, LRRCN) and a so-called brother nation the Tallcree First Nation (henceforth, TFN). I deal with the LRRCN mainly in this chapter. In a broad sense, the Peace River country may include all of the drainage of the Peace River, including its headwaters of the Finlay and Parsnip valleys and the Hay and Fort Nelson Rivers in British Columbia in the west and the northwest, but particularly this

chapter revolves around a lower strip stretching from the town of Peace River in the south to the vicinity of Lake Athabasca (the Slave River) in the northeast. This drainage basin is surrounded by what is now called Wood Buffalo National Park in the northeast and the Caribou Mountains on the north (designated as Caribou Mountains Wildland Park in 2001), the Buffalo Head Hills in its south, and the Birch Mountains ranges to the southeast (see Figure 1.1)

The LRRCN consists of three communities with its administrative centre at John D'or Prairie (Indian Reserve [IR] number 215) which is located on the left bank of the Peace River in the middle of the country (W115'10", N58'30"). The other two downstream communities are Fox Lake (IR No. 162) and Garden River. John d'Or Prairie and Fox Lake are specific reserves set up on both sides of the Peace River, whereas Garden River is 11 kilometres inside the boundary of the Wood Buffalo National Park. Among the three communities, John d'Or Prairie is the most accessible, but without a four-wheeled vehicle, the 110 kilometres of half-paved and half-gravel road (Route 58) from the town of High Level, a relatively new commercial centre of the country, is difficult to drive. There is no bridge between John d'Or Prairie and the LRRCN's largest community, Fox Lake, 30 kilometres further east. A barge is the only form of transport in summer, which is available at a place where the Mikkwa River feeds in to the Peace River. When the rivers freeze from November to March, they became ice roads. The TFN's five reserves are located around Fort Vermilion. Two major reserves, North and South Tallcree, are along Route 88.

According to the 2001 Census of Canada, the populations of John d'Or Prairie, Fox Lake, and Garden River were 851, 1254, and 369, respectively (Canada. Statistics Canada 2003). The age distribution is skewed to the younger generation, and approximately 67 per cent of the total population is under 25 years of age. The rate of annual population growth is about 3.5 per cent, and the communities are growing but had effective unemployment rates of 85 to 90 per cent in the late 1990s (LRRCN et al. 1997:23-24). Also, the 1996

Census shows that 55 per cent of the population received less than a grade-nine education, 27 per cent of its population, a grade-nine-to-13 education, and the population with a university degree accounts for only six per cent of the total (Canada. Indian and Northern Affairs Canada [INAC] n.d.). Lack of job opportunities and education are serious problems in the communities.

6.2.2 The History of the First Nations Communities

The LRRCN and the TFN were originally a single community until the late 1930s when the nation split into two. It is said that their ancestors migrated to this area along the Peace River from the east (Rita Loonskin, my liaison person from the LRRCN, personal communication, 10 August 2004), and presumably it began from the 18th century onward. Like other Aboriginal groups as discussed in Chapter 2, Cree collaborated very well with fur traders in extending a trading network westerly and establishing trading posts. Collaboration in the fur trade with Europeans spurred their westward migration from the James Bay area, which was their original habitation. The centre of this lower Peace River country was once the town of Fort Vermilion, which has its origin back to 1798 (Kitto 1930:12). That was one of the expeditionary base sites of Alexander Mackenzie, who was a partner in the North West Company (NWC) and arduously found inland travel route to the Pacific coast over the Rockies. Since then, based on trading posts including Fort Vermillion, prospectors, homesteaders, and missionaries, and fur traders as well, had penetrated into the lower Peace River country. In general, it is said that after the coalition of the Hudson's Bay Company and the NWC in 1821, such groups strategically chose their settlements near local trading posts in order to get involved in the fur trade (Smith 1978: 258-259). For the LRRCN, they rather lived nomadically at a number of small, remote sites in the forests in small family units (LRRCN et al. 1997:16). It is said that their territories of traditional use amounted to seventy thousand square kilometres of the

forested-land base (National Aboriginal Forestry Association [NAFA] and Institute on Governance [IOG] 2000:60). Putting cultural significance to many different sites, they pursued a traditional economy based on hunting, fishing, trapping and gathering. Among many sites, trading post-mission complexes still have historical significance, such as Jackfish, Fifth Meridian, and Little Red River. Even today, Little Red River, which is the confluence of the Peace River and Mikkwa River and houses Christian facilities, serves as a place of pilgrimage in the beginning of August, and the gathering of the nation that takes place after that draws many people from the communities. Although the federal government had already conducted the first survey for the Indian Reserves by 1912 (Madill 1986), the LRRCN community members did not settle down on the reserves until 1957 (LRRCN et al. 1997:16). By the 1950s, they began to have opportunities to engage in agriculture and forestry activities in this country. Since then, the LRRCN, as a hunting and gathering people, gradually settled down in Indian Reserves, and by the 1980s most members were sedentary within the three small communities.

6.3 History of Northern Settlement and Industrial Development

6.3.1 Introduction

The above-mentioned brief historical overview of the First Nations would clearly illustrate that their lifestyle has significantly been transformed by a century's settlement and development by Euro-Canadians. Northern Alberta finally opened up the same way as elsewhere in Canada was opened up just as I have discussed in Chapter 2. The nature of the frontier economic life was, and has been, exactly based upon resource-dependent industry, and economic expansion was, and still is, supported by the provincial government mainly and the federal as well. Northern development and industrial development ushered in a significant transformation in northern Alberta's economy. Pushing a frontier line northerly

was accomplished at the expense of environmental health, and all the more because of that, Aboriginal communities were being dispossessed of land and forests which they had traditionally occupied. The history of the opening up of the Peace River country was divided into two periods. If the first half of the twentieth century was to be a period when homesteading was driven by agriculture, large scale petroleum and forestry industries took over the role in the latter half of the century. This section reviews the history of settlement and industrial development in northern Alberta and the lower Peace River in particular. My intention in this section is to illustrate more than a century of the environmental degradation, and as a result of it, a long history of Aboriginal struggle against land and resource dispossession.

6.3.2 Opening up of the Peace River Country: Agricultural Development

Often called the "delayed frontier" or the "last great frontier," northern Alberta remained relatively as a hinterland until recently. The existence of large tracts of arable land along the Peace River and large amounts of the natural resources, including the mineral and the oil deposits had long been known; however, dense stands of trees, creeks, marshes, and an unpredictable climate as well, checked the proceeding of homesteaders from the south. What made it possible for settlers to proceed into this area were mainly the following three key factors as shown in Table 6.1: 1) the establishment of an administrative and legal infrastructure, such as homesteading policies and local police detachments, 2) the improvement of agricultural techniques, and 3) the extension and the improvement of transportation (Wetherell and Kmet 2000). First, Treaty Eight introduced a legal basis for land ownership in 1899. Then, two Dominion Land Offices, established in the southern Peace River country, administered all issues involving Crown land (the public land), homesteading in particular, in the Peace River country.

Table 6.1 Settlement in the Peace River Country in the first part of the 20th century

Legal basis	Transportation	Agriculture	Population increase
1899 Treaty 8 introduced a legal basis for land ownership. **1909** Dominion Land Office (Grouard) opened. **1911** Dominion Land Office (Grande Prairie), opened. **1915** Grouard Dominion Land Office, transferred to Peace River ➢ Indian Reserves gradually established.	**1870s~** Wagons & carts along trails mainly made by the HBC; Scows & Steam boats along the river with portages, and frozen trails in winter **~1916** A railway link Extended (Edmonton– Grande Prairie–Peace River) **1920s** Roads, still only old trails even between the Edmonton - Peace River regions ➢ Impassable during winter and in wet weather **1920–26** Railway ➢ High freight rates ➢ The deadlock over improvement of transportation **Late 1920s** Freight rates fell, but still high and inequitable. Yet, the railway system remained the major shipping way.	Economy remained an earlier form of a frontier region, revolving around trapping, fishing, hunting, and seasonal labour. **1910** Introduced Marquis, high quality and early maturing wheat, which dissipated concern of farmers about the short growing season and soil conditions in the Country. **1920–26** ➢ Wheat and livestock prices fell ➢ A series of poor harvests ➢ The land values fell because of downturn **1926–27** Bumper harvests ➢ National economy recovers. ➢ Wheat prices rose.	Before establishment of Land offices, people continued to squat in the Country, particularly around the Grande Prairie region. **1911** Fewer than 2,000 Aboriginal peoples and settlers (Census). **During WWI (1914–18)** Immigration from Europe suspended. **After WWI** Veterans settled down **1921** Population: 20,000 ➢ Emigration continued from other places in Canada and the United States. **1920–26** Farm settlement declined temporally. ➢ Many veterans left their purchased land and farms **Late 1920s** Settlers, brought back to the country **1926** Population: 22,600

Continued to the next page

Table 6.1 Continued

Legal basis	Transportation	Agriculture	Population increase
	1929 Northern Alberta Railways synthesised jointly by the Canadian Pacific & the Canadian National Railways (CPR& CNR)		**1928** Homestead applications, filed to the Land Offices (Grande Prairie & Peace River): 34 % of total western Canada's entries
1930 Natural Resource Transfer Agreement (NRTA)			**1930** Population: 61,000
	1932 A highway (Edmonton - Peace River) established (not fully gravelled until after WWII.)		
1939 Alberta abolished homesteading. ➢ Made land available only by lease.	**~1940s** No road suitable for cars north of Notikewin (app. 85 km north of Peace River)		
1948 Partitioned the land base of northern Alberta into the Green & White Areas.	**1948** Mackenzie Highway established (A year-round road to the North West Territories)	**1948** Agriculture activity, confined to the area along the Peace River (White Area).	
	1963 Railway extended to High Level.		

Based on Wetherell and Kmet (2000). NB This chronological table is not exhaustive.

Second, the introduction of the fast-growing Marquis wheat in 1910 dissipated concern about cool conditions of northern Alberta and grew an expectation that the Peace River country was a suitable place for *mixed farming*, where farmers raised livestock and grew some oats, wheat, and barley and forage crops. By the time when good quality land became scarce in southern Alberta, prospective settlers turned towards the Peace River

country. Third, the development and the reorganization of transport gradually solved the difficulty of accessibility and helped push the agricultural frontier line up into the Peace River country. Because the development of roads lagged behind, a railway system remained as the major transport. Yet still, the major rivers served as important routes for transportation and communications. Particularly, frozen rivers and lakes were taken as the shipping route, called a winter highway. During this period, a variety of means of transport was used, ranging from ancient technology (canoe, horseback, wagons and sleighs), to older technology (steamboats), to relatively new technology (railways) and to the newest technology (airplanes). The coexistence of different means of transport reflected the presence of different economies of fur, crops and minerals. In all cases, the form of transport used depended on the extent that that staple industry made a healthy profit.

One of the problems in those days concerning land use was unsystematic settlement of homesteaders. After the provincial government received approximately 87 per cent of the land within its boundary from the federal government in 1930 (as for the effects on Aboriginal peoples, see Chapter 3), the government started regulating land use policy. In 1939, the provincial government abolished homesteading and made land available only by lease. Then, in 1948, the government implemented the formal land classification scheme and confined agricultural activities to the White Area such as the lower strip along the Peace River. The other area is called the Green Area, which is supposed to be suitable for non-agricultural use.

6.3.3 Signs of Ecological Degradation

As early as the first half of the century, a massive influx of settlers into the Peace River country had already resulted in some signs of ecological degradation. A faster pace of forest conversion into farmlands encroached on wildlife habitats, and an increase of Caucasian hunters led to over-hunting of wildlife.

Thousands of wood bison (buffalo: *Bos bison athabascae*), once roaming throughout Alberta, were reduced to only a few hundred in populations remaining over the north of the Peace River by the beginning of the twentieth century. Having been concerned about a decline of bison populations, the federal government established the Wood Buffalo National Park in 1922, which amounts to 44,807 square kilometres adjoining the Caribou Mountains in the west. Although the populations have been barely preserved since then, wood bison is now listed as "At Risk" ("Endangered") under Alberta's Wildlife Act (Alberta. Sustainable Resource Development and Environment 2001).

As for trapping, competition between Aboriginal and White trappers had already risen to the surface before the signing of Treaty Eight and became serious during the interwar period (Madill 1986; Wetherell and Kmet, 2000:374-382). In order to maintain furbearing populations and a social order in trapping, the provincial government introduced the registered trapline system in 1939, where each trapline was allocated to an individual who had a right to trap there and the number of game animals allowed to be taken was restricted. The imposition of the idea of individual ownership of traplines brought about confusion into Aboriginal communities because the idea of individual ownership is incompatible with an Aboriginal way of trapping. Their trapping is conducted on the family units basis. What is worse, this system eventually equalized participation of Aboriginal and White trappers into the fur trapping economy.

These early days' land reclamation and forest use were limited in scale, but the latter part of the twentieth century saw large scale development both in White and Green Areas owing to the introduction of mechanised machinery, such as tractors, and governmental industry policies. The next section deals with the details.

6.3.4 Economic Diversification of Alberta (the forest and petroleum industries)

The province of Alberta may be better known for magnificent views of the Rocky

Mountains with blue skyscapes than for forestry and the oil and gas industry, which actually take place actively in northern boreal forests. These industries are the important revenue sources of the province. For instance, forestry generates $2.5 billion toward the budget surplus in 2003 (Canada. Natural Resources Canada 2004). Also, Alberta produces oil as much as OPEC countries do, such as Kuwait and Nigeria, and in terms of natural gas production, Alberta is the third largest producer in the world (Alberta. International and Intergovernmental Relations [IIR] 2004). At present, Alberta produces approximately 81 per cent of Canada's natural gas and 67 per cent of its crude oil (Alberta. Economic Development 2005). These two major industries, which became active from the middle of the twentieth century onward, are part of Canada's reiterated theme of the staples-based economy.

A new economic life for Alberta was inaugurated in 1947 by the discovery of conventional oil fields at Leduc, south of Edmonton. Soon, oil strikes followed in various parts of southern Alberta, and oil booms spread throughout Alberta. As described below in detail, towns in the lower Peace River country such as High Level, were also animated by oil strikes. As for natural gas, as late as the 1950s, a pipeline was built in the Peace River country and started transporting natural gas to distant markets such as Vancouver. Alberta's economic growth was supported by stable oil prices during the 1950s and the 1960s. Moreover, during 1973 to 1974, and 1978 to 1979, when oil prices increased enormously due to events in Middle East, the Alberta economy overheated (Wetherell and Kmet 2000:404-408). Despite luxuriant oil deposits in the province, in the Fort McMurray district, people were eagerly undertaking an arduous experimental venture, seeking to gain commercial values from bitumen (a black viscous mixture of hydrocarbon), which is obtained from oil sands (a mixture of sand and bitumen). The Fort McMurray district has been said to be one of the largest oil reserves in the world. Finally, with governmental financial agreements, commercial use of oil sands started in the late 1960s.

However, the petroleum industry is vulnerable to the international market. In early 1986, Alberta's economy was forced into a tight squeeze due to the unexpected fall in international prices for oil, and grains and other agricultural products. In order to pull the province out of recession, the Alberta government was expected to figure prominently in the province's economy. Economically stable alternatives to oil and gas were sought out. Then, it was boreal, aspen forests, vast-spreading north of Edmonton that the province decided to use. Until the early 1980s, the commercial value of aspen was almost nothing, but technological advances overcame difficulties of using shorter wood fibres of broad-leafed trees for pulp and oriented strand board (OSB).

In Alberta, at present, a forest company has to enter into an agreement with the province, called a Forest Management Agreement (FMA). The terms of an FMA is summarised in Table 6.2. Because the province assumed jurisdiction over 87 per cent of land, almost all forests were at the province's disposal. The FMA system was originally introduced into Alberta in the 1950s. In those days, forestry was a growing industry due to booms lasting from the wartime. Many lumber mills were run by family-owned small local companies in local areas, and they provided job opportunities for local communities. It is said that many Aboriginal people in northern Alberta were able to enter the lumber industry and maintain their job positions (Wetherell and Kmet 2000:347). These mill owners had to bid the highest price for a timber-cutting right of the province, which sometimes caused overbidding. Therefore, there was a concern that bidding could make some inroads into the firm's budget necessary for the reforestation programme. The institution of an FMA was introduced to solve this problem. If a company committed itself to build a major wood processing facility, such as a pulp mill, and made a plan for reforestation after clear-cutting, the government provided a long-term forest tenure and low and stable stumpage. At the outset, the FMA institution was evaluated as successful because this provided an incentive for firms to manage defined forests on a long-term basis

(Pratt and Urquhart 1994:14-16).

Table 6.2 Timber disposition (forest tenure systems) in Alberta

Timber disposition	Forest Management Agreement (FMA)	Timber Quotas	Timber Permits
The nature of tenure agreement	Area-based tenures (which provide the forest company with rights and obligations within a specified land area)	Volume-based tenures (which set the amount or volume a company may harvest)	Volume-based tenures
Period	20 years (renewable)	20 years (renewable)	30 days to five years
Requirements for the establishment of a facility	A company must establish a major wood processing facility (e.g., a pulp mill, a sawmill, and a plywood mill)	No requirement	No requirement
Management policy	➢ Long-term ➢ Sustained-yield	➢ Long-term ➢ Sustained-yield	➢ Short-term ➢ Sustained-yield
Plans to be developed	A Detailed Forest Management Plan (every 10 years) (including public consultation)	➢ Annual Operating Plans (AOP) ➢ General Development Plans	No
Reforestation obligations	Yes	No	No
Others	➢ Will compensate for the loss of timber when other industries remove trees from the FMA area (e.g., energy exploration). ➢ May assist a company in receiving corporate financing from lending institutions.	–	–

Based on Alberta. Sustainable Resource Development (2004a)

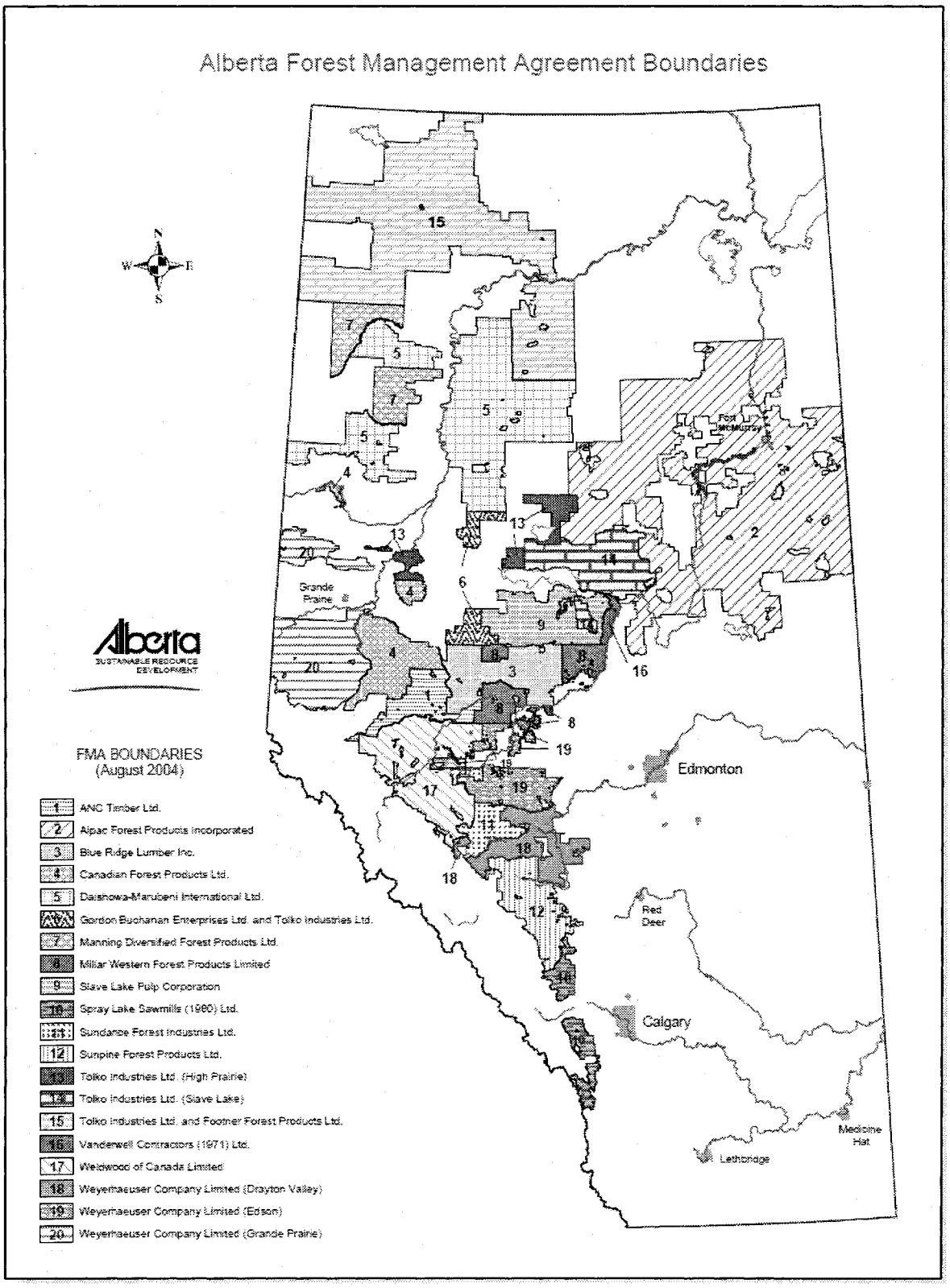

Figure 6.1. Alberta Forest Management Agreement (FMA) boundaries (Cited from Alberta. Sustainable Resource Development [2004b])

However, after 1986, when Alberta's economy faltered, the government tended to equate economic development with resource megaprojects (Pratt and Urquhart 1994:56). In order to realize a large-scale forestry (pulp and paper) project in northern Alberta, large multinational forest companies were more preferable than local, small forest companies. They have the size to lower costs associated with forestry operations and to manage a large amount of capital to invest into such megaprojects. Also, the government felt that consolidation of operational forested areas was needed to attract such integrated forest companies into northern Alberta, rather than letting operational forested areas be fragmented, where small local-based companies were vying with each other for business. Between 1986 and 1995, a fifth of Alberta's forests, or approximately 136,120 square kilometres, were allocated to eleven transnational companies (May 1998:174). In this way, economic diversification led by the province has changed the structure of the forest industry. As of 2004, Alberta has twenty FMAs and 17 FMA holders (Alberta. Sustainable Resource Development 2004a; see Figure 6.1). Incidentally, within these FMA areas, there are other companies with volume-based Timber Permits and Quotas that are harvesting timber under the supervision of an FMA holder or FMA holders.

6.3.5 Problems Associated with the Industry Change

The governmental economic strategy worked out. Indeed, governmental incentives such as the long-term, secure tenure system, large extent of operational forested tracts, the low stumpage, the development of transportation infrastructure by the government, direct financial assistance and subsidies were enough to attract multinational forest companies, which were looking for a large quantity of cheaper timber with less environmentalism pressure. Until the late 1980s, the environmental movement was less active in Alberta than it is today (Pratt and Urquhart 1994:47, 95). However, this brought about the following three problems.

Table 6.3 Two types of classifications of Alberta's forests and their comparison

Beckingham and Archibold(1996)		Strong and Leggat (1992)	
Natural Region	*Subregion*	*Ecoregion*	Site
Boreal Forests	Central Mixedwood	Mid Boreal Mixedwood (BM)	➢ The Buffalo Head ➢ The lower slopes of the Caribou and Birch Mountains (The most representative vegetation in northern Alberta)
	Dry Mixedwood	Low BM	➢ The strip along the Peace River from Grande Prairie to Fort Vermillion
	Wetland Mixedwood	Mid BM	➢ Hay River -Chinchaga River Delta
	Peace River Lowlands	Mid BM	➢ Peace-Athabasca Delta
	Boreal Highlands	High BM	➢ Uplands and steep slopes of the Birch and Caribou Mountains ➢ Buffalo Hills
	Subarctic	Boreal Subarctic	➢ The uppermost areas of the Caribou and Buffalo Mountains
Canadian Shield	Athabasca Plain	Mid BM	➢ The northern portions of eastern Alberta Plain and Uplands
	Kazan Uplands	High BM	➢ Northeastern Alberta

NB The term *Natural Region* and the subcategory *Subregion* are defined in Beckingham and Archibold's (1996) field guidebook, which is a federal government publication issued by the Canadian Forest Service. On the other hand, *Ecoregion* is the term used in Strong and Leggat's (1992) report, which was published by the Alberta Forestry, Lands and Wildlife. Since the publication of the first edition in 1981, the report once has become a provincial standard for the classification of Alberta's regional vegetation (Strong and Leggat 1992:1); however, the province developed and began to use *Natural Regions*. More recently, there seems to be a movement on behalf of the province move back to the *Ecoregion* approach (Shirley Nelson, one of the contributors to the making of Strong and Leggat's report, e-mail message to author, 12 August 2005). Because of this process, there seems to be confusion about the correct usage of the terms in some books and documents. While *Natural Regions* are based on the physiognomic features of vegetation and the land, *Ecoregions* reflect the climatic conditions. When reading governmental documentation and environmental groups' publications, one needs to be careful about which classification an author or authors rely on. Comparing both guidebooks, I roughly correspond *Natural Subregions* with *Ecoregions*. Agreeing with Strong and Leggat's opinion that vegetation is the most obvious factor to reflect climatic changes, I use the *Ecoregion* approach in this thesis.

First, more forested areas were converted into industrial land. According to Strong and Leggat's (1992) ecological classification, northern Alberta's boreal forests include the Low, Mid, and High Boreal Mixedwood (BM) Ecoregions and the Boreal Subarctic (BS) Ecoregion (Table 6.3). Until the first half of the 20th century, settlement and associated human activities (e.g., mixed farming) were confined to the Low BM Ecoregion. The Mid BM Ecoregion had not been considered to be appropriate for intensive use of it, but, as noted above, because aspen got commercial values, the large extent of clear-cutting in this Ecoregion started. Moreover, governmental lavish oil and gas concessions to companies increased the density of seismic lines in these BM Ecoregions. Seismic lines are long linear corridors, usually six to eight metres in width, cleared by bulldozers before petroleum exploitation occurs. By exploding dynamite charges along the corridors and receiving seismic sound waves reflected from underneath features, contract companies survey where oil and gas deposits are and their amounts (Schneider 2002:47-50). This type of petroleum exploration and the succeeding operations for exploitation are said to have significant impacts on forest ecosystems. In addition to the forest and the petroleum industries, agricultural lands continued to expand in the Peace River country, and by the beginning of the 1990s, this region became a place of "Canada's fastest-advancing agricultural frontier." (Canada. Environmental Canada 1991:5-9 [page 9 in chapter 5]). Accordingly, there has been a growing concern about ecological integrity of boreal forests in northern Alberta. For instance, trumpeter swan (*Cygnus buccinator*), wolverine (*Gulo gulo*) and grizzly bear (*Ursus americanus*) are considered as 'may be at risk' (Alberta. Sustainable Resource Development and Environment 2001:34, 38). Even though moose is not considered to be on verge of extinction, Aboriginal and recreational hunters have expressed concerns about a decline in moose populations.

Second, a number of small, local, and independent mill operators were eliminated because large, international, integrated forest companies occupied northern Alberta's

forests. Because an FMA requires the establishment of a mill capable of coping with timber supplied from a relatively large extent of forest management units (FMUs), there was no room for small, local mill owners with small amounts of capital investments. Also, multinational companies' highly mechanised forestry operations did not create job opportunities for local communities. For instance, Alberta-Pacific Forest Industries Inc. (Alpac), which finally obtained in 1991 the tenure of approximately ten per cent of Alberta's forests expanding north of Lac la Biche and the town of Athabasca through bitter debates between project proponents and environmentalists, created few jobs for local residents. In order to get involved in their forestry operations, people were required to have education of at least the grade twelve level and computer experiences, and own expensive facilities by themselves, such as a hundred thousand dollar's worth of logging trucks – which most of the residents lacked (Pratt and Urquhart 1994:158-160, 202-204). In this way, forestry operations in northern Alberta have been transformed from labour-intensive to highly mechanised.

Third, transnational companies that secured tenure to extensive forested tracts through FMAs did not seem to have the full understanding of Aboriginal and treaty rights. Local communities' voices are supposed to be incorporated into forest management during planning processes through public meetings or other means, but as seen in Chapter 3, there have been many problems with consultation processes. It is said that when Daishowa-Marubeni International Ltd. (DMI) signed an FMA with a vast spread of the area ranging from the town of Peace River to the south of High Level, the Lubicon Lake First Nation (better known as the Lubicon Cree) was not approached by either the province or the firm although their community of Little Buffalo was centred in the proposed forests. The Lubicon Cree was the First Nation overlooked by the Treaty Commissioners at the turn of the century, and since 1939 they had been negotiating for a treaty with the federal government (Pratt and Urquhart 1994:110). For the First Nation, forests are an integral

part of their subsistence and culture, and the ecological integrity needs to be maintained so that it may sustain the First Nation community. However, even before DMI's signing an FMA, their traditional territories had already been encroached upon by oil and gas exploration without any consultation. When DMI announced their project, Lubicon's claims were not heard by the government and the firm, and finally their intense dissatisfaction led to violent movement against the proposed project such as barricades, fire bombs and armed conflicts. As discussed in Chapter 4, this company's unilateral attitude towards the Lubicon Cree led to a full-scale boycott campaign against DMI's paper products.

6.3.6 The Case of the Little Red River Cree Nation

These above-mentioned situations were also experienced by the LRRCN and the surrounding communities. In the early years of northern settlement, land reclamation of the areas surrounding LRRCN's traditional territories is attributed to the Mennonite community in the hamlet of La Crete mainly and the Ukrainian farmers in the Rocky Lane area (AlbertaFirst.com Ltd. 2005). Mennonite farmers originally emigrated from Russia to Saskatchewan and Manitoba in the 1870s, and then they moved into this region in the 1930s (High Level Museum n.d.). In the 1940s, most of them moved to the La Crete area and established the hamlet, approximately 56 kilometres southwest of High Level. La Crete community members also worked for timber production on a seasonal basis. As for forestry, small mills were already built in the LRRCN's territories in the 1950s, and it is said that it is this period that LRRCN community members started working for forest companies (LRRCN et al. 1997:21-22). As illustrated in Table 6.4, they worked for Swanson Lumber Company's mill located in Garden River in those days (National Aboriginal Forestry Association [NAFA] and Institute on Governance [IOG] 2000).

Table 6.4 The economic development of High Level and Little Red River Cree Nation/Tallcree First Nation (LRRCN/TFN)

Lumber industry in High Level	Farming and oil industries, and others in High Level	First Nations (FNs) (LRRCN/TFN)
1957 *High Level Lumber Company* built the first lumber mill in the town. (Closed in **1963**)		**1950s** Started to settle down on the reserves. ➢ Many small bush mills were located in the Nations' traditional territories
1962 *Swanson Lumber Company* started timber production; Also held a logging right in Wood Buffalo National Park (WBNP).	**1962** Population 60 **1964** High Level became the world's most northerly grain rail shipping point.	**1960s** *Swanson Lumber* ran a mill in Garden River.
1963 *Great Slave Lake Railway* extended from the Peace River area.	**1965** The oil strikes at Rainbow Lake; Later at Zama Lake.	**Late 1960s** *Swanson Lumber* consolidated operations of small mills into one facility in High Level.
1964 Family-owned mills burgeoned in the area such as Footner Lake due to the arrival of the railway.	**Late 1960s** The oil boom days started. **1966–67** Pop. jumped up from 754 to 1551.	➢ The consolidation and the mechanization of the new mill made community members lost their job positions.
1977 *Swanson Lumber* built a new sawmill at the place where *North Peace Logging* was.		**Early 1970s** LRRCN obtained timber quota ➢ Continued a joint venture with a Métis logging contractor (~**1989**)
1981 *Swanson Lumber* became a subsidiary of *Canadian Forest Products* (*Canfor*).	**1980** The second highest farm acres of Alberta shipping points and the eighth highest in western Canada.	**1984** *Little Red River Forest Products* (*LRR Forestry*) established.
1983 *Swanson Lumber* changed its name from Swanson's to *Canfor* and completes integration.	**1980s** The oil activity continued thriving.	**Late 1980s** FNs' elders came to policy decision that they would seek to protect traditional lands by any means available.
1990 *Canfor* became a subsidiary of *DMI* (*Daishowa Marubeni International Ltd.*); *Canfor* changed its name to *High Level Forest Products Ltd.* (*HLFP*). ➢ *Canfor* retained a logging right in WBNP under *DMI*.		**1989–90** Unsuccessful in developing a specialty mill at John d'Or Prairie.

Continued to the next page

Table 6.4 Continued

Lumber Industry in High Level	Farming and oil Industries, and others in High Level	First Nations (FNs) (LRRCN/TFN)
1992 Federal government admitted illegality of offering a logging lease to *Canfor* with pressures of an environmental organization the *Canadian Parks and Wilderness Society* (*CPAWS*). **1996** *HLFP*'s quota allocation brought into the terms of a *Forest Management Agreement* (*FMA*). **1999** *Tolko Industries Ltd.* (*Tolko*) purchased *HLFP* from *DMI.* *Late 2000 Footner Forest Products* (*FFP*) facility went into production of oriented strand board (OSB).		**Early 1990s** Negotiated a plan with *HLFP*, creditors, and DIAND to purchase fibre at a fair market price and repay dollar for dollar over five years, which proved successful. **1992** The federal government announced a *Model Forest* programme. FNs worked together with the industry and the province on a proposal, which was not successful. **1995** A first *Cooperative Management Agreement* (*CMA*) signed through a MOU with the Alberta government for a Special Management Area (SMA). ➢ A Forest Management Board established with government and industry members. **1996** The Letter of Intent added more Forest Management Units (FMUs) to the SMA and included terms of timber allocations. **~1997** Participated in the making of the *Alberta Forest Conservation Strategy*. **1997** Submitted a second *Model Forest* proposal to the federal programme, but it was rejected again. **1999** A second *CMA* signed; the Board's mandate expanded; university research initiatives (the *Sustainable Forest Management [SFM] Network*) involved.
2003 *FFP* and *Tolko* jointly obtained an *FMA* in north of the town of High Level.		**2002** The province refused the renewal of the *CMA*. **2004** An analysis of *High Conservation Value Forest* (*HCVF*) started.

Based on High Level Museum (n.d.), LRRCN et al. (1997), NAFA and IOG (2000), Reid (1976; 1984).

NB This chronological table is not exhaustive.

High Level was once a small town built along the Mackenzie Highway as an agricultural frontier base of the lower Peace River country. When the railway reached this town from Roma Junction (near the town of Peace River) in 1963, many family-owned companies built mills around the town including the Footner Lake area (Reid 1983:24-32). Despite the colder climate, the farm industry grew, and the town became the most northerly grain rail shipping point in the world in 1964. Moreover, oil strikes at Rainbow and Zama Lakes drew more settlers to this town, and its population burgeoned during the development (Reid 1976:60-61). Then, from the late 1960s onward, the centralization and mechanization of the forest industry started. Swanson Lumber Company consolidated operations of small mills into one facility in High Level in this period, but in 1981 Swanson became a subsidiary of the Canadian Forest Products Ltd. (Canfor). Canfor became a subsidiary of the DMI in 1990, and eventually the Canfor mill was purchased by Tolko Industries Ltd. (Tolko) in 1999. At present, Tolko and Footner Forest Products Ltd. (FFP) jointly hold an FMA with an area of more than 3.5 million hectares north of the town of High Level.

As for the first problem, forestry and farming continuously made serious inroads into not only the Mid Boreal Mixedwood (BM) but also the Low BM Ecoregions in the lower Peace River country. Furthermore, the oil and gas companies began to penetrate the First Nations' forests, and by the late 1990s, more than a hundred dispositions for wellsites were active (LRRCN et al. 1997:22). Consequently, there has been a growing concern about impacts of these industry activities on the ecological integrity of boreal forests, wildlife populations, and Aboriginal hunting and trapping. Currently, the High BM and the BS Ecoregions, which fall on the Caribou and the Birch Mountains, are not intensively used, and only these regions provide habitats for woodland caribou (*Rangifer tarandus caribou*), which is now designated as an endangered species in Alberta (Alberta Sustainable Resource Development and Environment 2001:37). Therefore, conservation

of their populations is expected. (Hunting these animals was prohibited within the national park and anywhere during the closed season. However, LRRCN community members were given an exemption from the arrangement and have continued hunting and trapping within the park.) Second, with the forest industry changed from labour- intensive to mechanized, available jobs for community members were decreasing. Through this process, many Aboriginal community members lost their job positions. Third, because of these two factors, there seemed to be less possibility that Aboriginal community members could enjoy their treaty rights upon which they continued keeping their relationship to the land.

To sum, these above-mentioned three elements (1) the maintenance of ecological integrity of forests; 2) the creation of job opportunities; and 3) the accommodation of Aboriginal and treaty rights) are exactly the LRRCN's considerations from the 1990s onward, which were developed into strategies to sustain their communities. This issue will be discussed in more detail in the next chapter.

6.4 Seeking "A Fair Share" with Interests Outside of the Communities

6.4.1 Introduction

In order to retake some of the job positions lost by the LRRCN people through the industry change, they formed a forestry company called the Little Red River Forestry Ltd (LRR Forestry) in 1986 (LRRCN n.d.). Through this stand-alone company, they successfully gained timber quotas. Then, they tried to develop a specialty mill operation at John d'Or Prairie during the period of 1989–90, but this was unsuccessful. The 1990s onward saw significant changes within the LRRCN/TFN communities. This section deals with two strategies to sustain the First Nations that they have taken in order to sustain their communities: 1) treaty entitlement claims that what they call "ongoing treaty negations

with Canada" and 2) forestry and forest conservation strategies in what they call "interim consultation and negotiation with Alberta and industry" (Webb 2004b). Treaty issues and forestry and forest conservation issues may seem like a strange combination, but because of the nature of their struggle for self-reliance, these two issues tie together. What needs to be addressed is that, as Treseder (2000:25) notes, the LRRCN views Treaty Eight as "a solemn commitment to share use of [the] territory with non-Indians" (LRRCN 1998:1; emphasis added) and denies the Crown's interpretation of the treaty as a land surrender agreement. Therefore, the above-mentioned strategies are ones that have been used for negotiations for "a fair share" with the mainstream society. With this assumption, they desire to regain influence, not control, over the land and the resources that they believe they lost during the past treaty negotiation processes, and ultimately they hope to retake portions of the traditional land and the associated resources.

6.4.2 Treaty Entitlement Claims

As discussed in Chapter 3, most of Canada's Aboriginal peoples entered into treaties (or comprehensive land claim agreements) with the Crown. With these treaties, the government intended to extinguish Aboriginal rights and in exchange, provide treaty rights and benefits for Aboriginal peoples. For instance, these include the right to pursue their usual vocations of hunting, trapping and fishing throughout the surrendered tracts, provision of Indian Reserves, farming implements, annuities and so forth. As examined in recent court cases, the courts found that since the Crown imposed the exclusive nature of the relationship to Aboriginal peoples with treaties, the Crown must assume a fiduciary obligation to Aboriginal peoples. Also, the Crown must approach the interpretation of treaties in a manner which maintains the integrity of the Crown. If obligations to Treaty Indians as set out in treaties (and written comments of treaty commissioners in those days which are usually attachments to treaties) have not been fulfilled, Treaty Indians can claim

these issues to the federal government because of their fiduciary relation (Alberta Aboriginal Affairs and Northern Development [AAND] 2000a). So far, the LRRCN has submitted four claims and is working on a fifth claim (Webb 2005a).

The first treaty entitlement is one regarding a remaining entitlement to have Indian Reserves (Webb 2004b; 2005a). (Entitlement claims most commonly involve land like this claim, and this kind of a claim is often called *Treaty Land Entitlement Claim* [*TLEC*]. In this paper, while I refer to the entitlement claims to land as *TLEC*, the claims concerning matters other than land are labelled *treaty entitlement claims*.) Treaty Eight (1899) states:

> Her Majesty the Queen hereby agrees and undertakes to lay aside reserves for such bands as desire reserves, the same not to exceed in all one square mile for each family of five for such number of families as may elect to reside on reserves, or in that proportion for larger or smaller families.

There are people in the communities who did not receive their entitlement to land at the time of the signing of the treaty; therefore, the federal government must fulfill those treaty land entitlements. Particularly in the Prairie Provinces including Alberta, because of the Natural Resources Transfer Agreement (NRTA; later included in the *Constitution Act, 1930*), the province enters into negotiations with the federal government and the First Nations where TLECs have been validated by both governments. Then, the province returns the equitable extent of land out of the unoccupied Crown land to the federal government, so that the federal government can provide reserve lands for the First Nations concerned). Section 10 of the *Constitution Act, 1930* states:

> [T]he Province will from time to time, upon the request of the Superintendent General of Indian Affairs, set aside, out of the unoccupied Crown lands hereby transferred to its administration, such further areas as the said Superintendent General may, in agreement with the appropriate Minister of the Province, selected as necessary to enable Canada to fulfil its obligations under the treaties with the Indians of the Province, and such areas shall thereafter be administered by Canada in the same way

in all respects as if they had never passed to the Province under the provisions hereof.

Indeed, in 1993 TFN received 13,000 acres of land and $1.5 million from the Alberta government, and $5.5 million from Canada (AAND 2000b).

The second claim is also part of the TLEC and is one concerning the protection of their usual vocations such as hunting, trapping and fishing. According to archival research on treaty-related documents that the LRRCN undertook, in 1927 the federal government notified the Alberta government that it had an intention to create either a game reserve or a special reserve in order to protect Aboriginal interests (subsistence activities) of the LRRCN/TFN members from competition with Caucasian hunters and trappers, which area would amount to approximately 35,000 square kilometres (Webb 2004a; 2004b; 2005a). However, this was never created.

The third and fourth claims are ones concerning economic benefits. The third is the claim with respect to the "ammunition and twine" clause in Treaty Eight (Webb 2005a). Treaty Eight (1899) states:

> [Her Majesty agrees to supply] for such Bands as prefer to continue hunting and fishing, as much ammunition and twine for making nets annually as will amount in value to one dollar per head of the families so engaged in hunting and fishing.

However, it was found from archival research that the Crown did not actually pay money to them annually. They have claimed all the outstanding money and the accrued interest.

The fourth claim is one regarding the "ploughs and cows" clause (Webb 2005a). Treaty Eight states that the Crown would provide farming implements for those who would elect to undertake cultivation. The LRRCN has claimed the equivalent to modern equipment. In other words, they desire to have the provision modernized.

The fifth claim, which has not yet been prepared, is one regarding the "annuity" clause. Treaty Eight (1899) states:

> [Her Majesty will cause to pay] to each Chief twenty-five dollars, each Headman, not to exceed four to a large Band and two to a small Band, fifteen dollars, and to every other Indian, of whatever age, five dollars, the same, unless there be some exceptional reason, to be paid only to heads of families for those belonging thereto.

Taking into account modern values of the land and natural resources that they "surrendered," these annuities are outrageously cheap. The LRRCN believes that the Crown suggested such cheap annuities to them while knowing true values of what it was asking of Treaty Eight Indians. In light of the fiduciary responsibility of the Crown, the LRRCN believes the Crown must treat them in good faith and the LRRCN desires to negotiate for a fair share of land and resources with the federal government.

Through the above-mentioned five specific treaty entitlement claims, the LRRCN/ TFN anticipates that some larger share of land and resources will be returned to them. However, at the same time, they know with reference to other First Nations negotiations that it will be twenty years or more before their claims have been settled. Rather than waiting for their claims to be settled by the government, they have decided to take action by starting what they could do "on an interim basis." – Forest co-management involving the province and the industry sector. The start of this co-management and submission of a series of their treaty entitlement claims may be out of sequence, but these two strategies tie together in that the basis of their intention is to put a question to mainstream societies about what is "a fair share" of land and natural resources.

6.4.3 Co-Management

The 1990s saw a significant shift in forest policy both at the national and provincial levels. I have already discussed in Chapter 4 that the notion of sustainable development was taken into forest management regimes at the United Nations Conference on the Environment and Development (UNCED) in 1992 in response to growing environmental

awareness. The Canadian Council of Forest Ministers (CCFM), through cross-country consultation processes, recognized the changing attitudes of Canadians towards forests and set out new directions in the *National Forest Strategy: A Canadian Commitment* (the term covered is 1992–97; henceforth, the *1992 NFS*) incorporating the ecological, economic, social and cultural aspects of forest use and conservation (Canadian Council of Forest Ministers [CCFM] 1998). The 1992 National Forest Congress brought together a wide range of participants including governments, industry, academia, Aboriginal groups and so forth, and they signed the first Forest Accord to make sure their commitment to making the *1992 NFS* a reality across Canada. Alberta signed this accord. Then, in order to fulfill the commitment under the accord, the Alberta Minister of Environmental Protection established a multi-stakeholder steering committee, the Alberta Forest Conservation Strategy Steering Committee (AFCS-SC). The term *stakeholder* means "anybody who feels that his or her interests will be affected by the outcome of a decision-making process" (AFCS-SC 1997). Given that 87 per cent of Alberta's forests are owned by the province, stakeholders would include almost all Albertans. Accordingly, Alberta needed to accommodate a wide variety of views of Albertans towards forests, who enjoy diverse benefits coming from multiple-functions of forests such as environmental benefits (i.e., climate moderation and carbon storage), economic benefits and recreation. This Steering Committee undertook three years' public consultation process and collected eight hundred Albertans' views of the future ideal future forests. Their task was to provide recommendations of proper forest use to the province. In fact, the LRRCN participated in the development of the strategy. These changing social and political landscapes backed by growing environmental concern provided Aboriginal peoples a foundation for participation in forest management, who were losing influence over forests of traditional use and suffering from indifference of Aboriginal and treaty rights by the industry sector with megaprojects. The *1992 NFS* includes Aboriginal issues among its nine directions.

Direction Seven ("Aboriginal People: A Unique Perspective") regards Aboriginal land ethics deeply rooted in traditional, cultural beliefs, Aboriginal rights being defined by the *Constitution Act, 1982* and Supreme Court decisions, and their access and use of forest resources as important considerations to increase Aboriginal self-reliance (CCFM 1992). (The succeeding *National Forest Strategy 1998-2003* [henceforth, the *1998 NFS*] further states in its Direction Seven that the implication of the definition of Aboriginal and treaty rights by the Supreme Court needs to be translated into forest management regimes and practices [CCFM 1998].)

Just at that moment, the Alberta government set about a process for dialogue with the Alberta Grand Council of Treaty Eight First Nations. Both parties signed a Memorandum of Understanding (MOU) in February 1993, which was the first one that signalled a dialogue between the government and Alberta First Nations (AAND 2001). This MOU was aimed at a means of consultation by government with the Treaty Eight First Nations regarding new and existing policies, programmes and services. A dialogue between the LRRCN/TFN culminated in May 1995 in the shape of a co-operative management agreement with the signing of a MOU. This 1995 MOU was made with the aim of economic development for both Alberta and the First Nations through co-management of forests within the First Nations' areas of traditional use (Alberta and Little Red River Cree/Tallcree First Nations [LRRCN/TFN] 1995). Specifically, Forest Management Units (FMUs) of F23 (divided into F3, F4 and F6 in those days, amounting to approximately 9,700 square kilometres), were defined as the Special Management Area (SMA), and within the SMA, companies owned by the First Nations (i.e., LRR Forestry, and Askee Development Corporation established in 1994) and the private sector HLFP/DMI assumed forestry operations (see Figure 6.2 on page 141). In order to realize effective dialogue, a Forest Management Planning Board (henceforth, the Board) was set up, and representatives from the Alberta government, the First Nations, and the Municipal

District of Mackenzie No. 23, to which the SMA belongs administratively, were responsible for developing a Forest Management Plan (see Table 6.5 on page 142). With this agreement, the First Nations gained significant amounts of forest tenure (timber permits and quotas). More FMUs, F10 and F24, were added to the SMA and more timber resource was allocated to the First Nations. The management unit of F24 was divided into F2, F5 and F7 in those days, amounting to approximately 9,900 square kilometres, and among the approximately 1.2 million square kilometres of F10, approximately 6,000 square kilometres were set aside for conservation purposes, which was designated later as Caribou Mountains Wildland Provincial Park (Alberta and LRRCN/TFN 1996). Therefore, by 1997, within approximately 25,000 square kilometres of the FMUs, the LRRCN was to assume approximately 296,000 cubic metres of timber allocation (241,000 for coniferous; 55,000 for deciduous) and TFN, 80,000 cubic metres (all for deciduous).

The 1995 MOU expired in May 1998 and was renewed in September 1999. Taking into account strengths and weaknesses of the decision-making process which flowed from the MOU, more detailed terms and conditions of the decision-making process were included in the new MOU (Alberta and LRRCN/TFN 1999). The name of the Board was changed to the "Cooperative Management Planning Board," (henceforth, the new Board) and its mandate was to develop a "Cooperative Renewable Natural Resource Management Plan," which was based on a landscape assessment and a "resource management philosophy and goal statement."

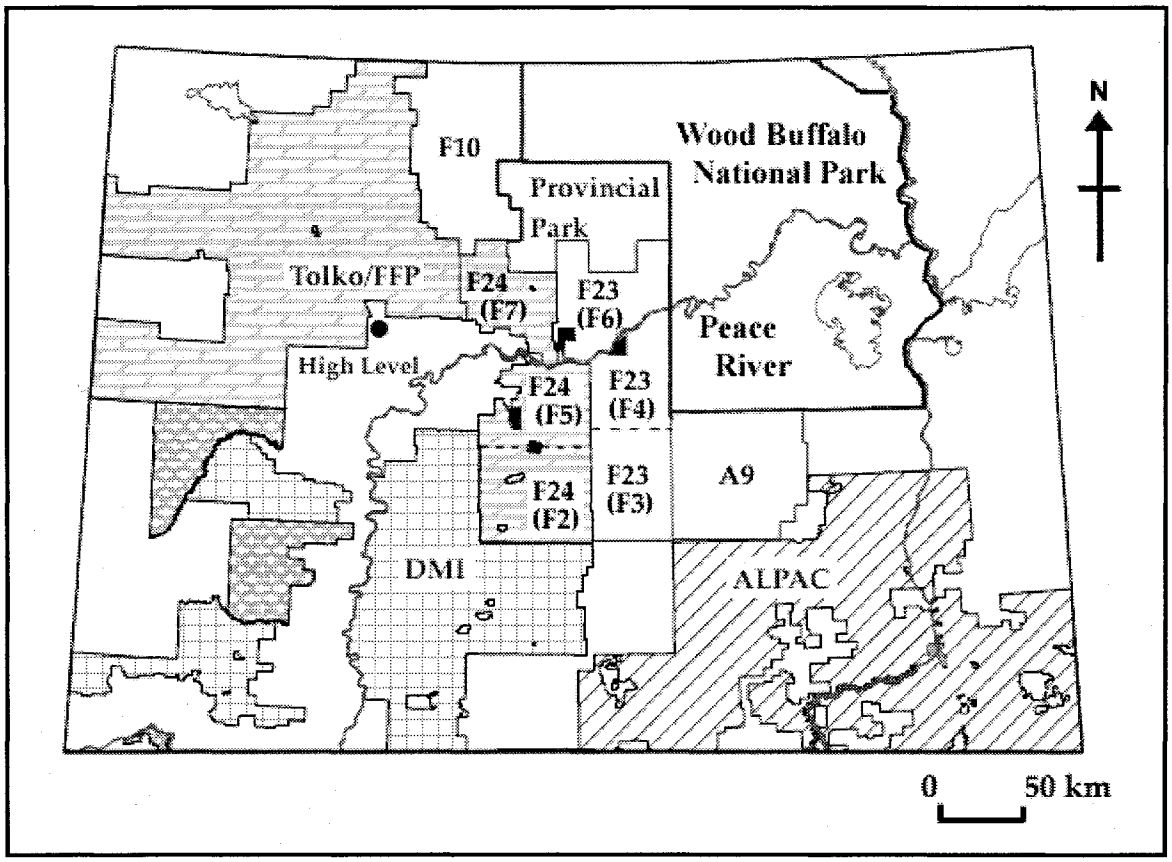

Figure 6.2. The Special Management Area (SMA) established through the Co-operative Management Agreement (CMA) in northern Alberta; the SMA was originally comprised by Forest Management Units (FMUs), F3, F4 and F6 (Alberta and the Little Red River Cree Nation and the Tallcree First Nation [LRRCN/TFN] 1995). Later, FMUs, F2, F5, F7 and F10 were added to the SMA with the Letter of Intent (Alberta and LRRCN/TFN 1996). Furthermore, it was decided that forest tenure in A9 would be allocated to the TFN in 1999 (Alberta and LRRCN/TFN 1999). In 2001, Caribou Mountains Wildland Provincial Park, which amounts to 5,900 square kilometres, was created from the portion of F10. Currently, the FMUs, F3, F4 and F6 are consolidated as F23; F2, F5, and F7 are called F24.

Table 6.5 Planning board machinery defined by the two Memoranda of Understanding

	The 1995 MOU	The 1999 MOU
Planning board	Forest Management Planning Board	Cooperative Management Planning Board
Plan to be developed	Forest Management Plan	Cooperative Renewable Natural Resource Management Plan
Representative (voting members)	➢ Alberta 3 ➢ LRRCN 3 ➢ TFN 2 ➢ Municipal District of Mackenzie #23 1	➢ Alberta 3 ➢ LRRCN 3 ➢ TFN 2 ➢ Municipal District of Mackenzie #23 1 ➢ DMI 1 ➢ FFP 1 ➢ Askee Devel. Corp. 1 ➢ Netaskian Devel. Corp. 1
Non voting member	➢ Resource-based industries (forestry, oil & gas) ➢ Special interest groups	➢ Resource-based industries (oil & gas, precious metals, mines, mineral resources) ➢ Environmental NGOs
Law and principles	➢ Treaty Eight, 1899 ➢ Constitution Act, 1982 ➢ Canada Forest Accord, 1992 (Direction Seven) [sic.] *	➢ Treaty Eight, 1899 ➢ Constitution Act, 1982 ➢ Canada Forest Accord, 1998 ➢ National Forest Strategy, 1998 (Direction Seven) ➢ Interim Forest Management Planning Manual, April 1998 ** ➢ Alberta Forest Legacy, 1998
Forest management principles	➢ Sustainable development ➢ An integrated approach ➢ An ecosystem approach ➢ Multi-stakeholder input	➢ Sustainable development ➢ Adaptive management ➢ Ecological management practice

Based on Alberta and Little Red River Cree/Tallcree First Nations (1995; 1999).

* The 1995 MOU reads Forest Accord; however, Direction Seven is one of the directions included in the *1992 National Forest Strategy*, not in the *Canada Forest Accord.*

** Alberta's Land and Forest Service (1998)

As included in this 'resource management philosophy and goal statement,' the basic ideas of this co-management are based on:

1) *ecosystem management* in the spirit of *sustainable development*,

2) *integrated resource management*, and

3) *adaptive management*.

First, *ecosystem management* may be better known as the term *ecological forest management* and its basic idea is based on a precautionary approach where human activities in forests must not interfere with the ecosystem's ability to perpetuate itself (Alberta Forest Conservation Strategy Steering Committee 1997:7-9). Boreal forests in northern Alberta have evolved under natural disturbance (mainly fire); therefore, human activities, ranging from resource extraction to recreation, should be similar to natural disturbance. Second, under *integrated resource management*, multi-stakeholders' uses, such as traditional and non-traditional use (forestry in this case, and hopefully the oil and gas and other industries), are balanced. Third, the key idea behind *adaptive management* is that there still are a lot of things that we do not know about forest ecology; ways of interacting with forests must be flexible to change, based upon the need for implementing the best available science. In order to follow these scientific concepts, the Network of Centres of Excellence in Sustainable Forest Management at the University of Alberta (the SFM-Network) was counted as a cooperative research and planning partner and established the SFM-Network Caribou-Lower Peace Research Initiatives (Alberta and LRRCN/TFN 1999). When the federal government held the competition for Phase II of Canada's Model Forest Programme in 1997, the First Nations worked with the province, Parks Canada, HLFP/DMI, and the SFM-Network to prepare a proposal to establish an Aboriginal version of Model Forest. Unfortunately, their application was not selected, and the Waswanipi Cree (a community of the James Bay Cree) of northern Québec was selected. (As noted above, the LRRCN actually submitted a proposal in response to a call

for Phase I of the Model Forest programme in 1992 in cooperation with the HLFP/DMI and the province, but this was also unsuccessful.)

The reason why they desired to enter into the Model Forest programme was that such a programme would involve the research and planning process that was needed for them to come up with an Aboriginal type of an *integrated resource management* model. Their focus in the first and the second Model Forest proposals was to achieve a balance between economic and traditional use of the forests. The LRRCN thought that the concept of *ecosystem management* would lead them to a desirable balance between traditional and industrial use of forests. During the period of the co-management, the First Nations continued negotiating larger amounts of Annual Allowable Cut (AAC). With the 1999 MOU, the unit A9 (amounting to approximately 51,000 square kilometres) was newly added to the SMA, and by 2000, the First Nations assumed timber disposition of approximately 211,000 cubic metres from coniferous trees and of 191,000 cubic metres from deciduous trees within the SMA (Treseder 2000:19-24). (TFN was allocated approximately 25,000 cubic metres of coniferous timber and 56,000 cubic metres of deciduous timber, but as of the summer of 2004, A9 is set aside for the future use.) At the same time, because their on-reserve life has only relatively recently started, subsistence activities such as hunting and trapping continue to play an important role in their livelihood, making a dual mode of economies (the bush and cash economies) of many households (Nelson 2003). Therefore, they have been faced with a difficult decision of how to cope with a trade-off between cutting trees and preserving the forests for subsistence purposes.

The evaluation of economic benefits arising from timber harvesting might be easier than that of values arising from traditional use of forests. The price of timber is translated into the amount of money, but how can values of an Aboriginal way of life be represented in a clear form? In order to deal with this problem, the LRRCN undertook traditional land use study (TLUS) with the SFM Network (Sustainable Forest Management Network 2001).

First of all, it was documented that their land use patterns have developed through their long-standing relationship with the landscapes they occupy. The most important point is that traditional use involves more than the need to protect discrete land areas; rather, community members see the forests in a more systemic way. Then, in order to clarify what values the LRRCN community members derive from forests and how those values could be protected, extensive interviews were conducted within the communities. Their values and views of forests were classified into six criteria and sixty-two associated indicators (Natcher and Hickey 2002). At that time, there were few examples of finding criteria and indicators (C&Is) for sustainable forest management on the local level despite the importance of C&I's being addressed in the governmental document *Defining Sustainable Forest Management: A Canadian Approach to Criteria and Indicators* (CCFM 1995). The main six Aboriginal criteria are:

1) To modify forestry operations to reduce negative impacts on wildlife species;
2) To modify forestry operations to ensure community access to lands and resources;
3) To provide protection to all areas identified by community members as having biological, cultural, and historical significance;
4) To recognize and protect treaty rights to hunt, fish, trap, and gather;
5) To increase forest-based economic opportunities for community members; and
6) To increase the involvement of community members in decision-making processes (Natcher and Hickey 2002).

In this way, it was seen that even a single community is not comprised of members with the same set of values and there must be a diverse set of values and views of their forests within the communities. These C&Is could be used for evaluation and monitoring of forest management that took place in the forests, and to evaluate trade-offs between competing values.

Furthermore, through interviews with elders and hunters of the communities, it was

recorded that there were significant wildlife populations within their traditional forests, such as moose and woodland caribou. Although the general biological aspects of moose and caribou were known by scientific data, specific information based on local settings were unknown. The elders and Aboriginal hunters were very knowledgeable about wildlife populations and habitats through long years of empirical observations and generational cultural transmission (Pyc 1999; Schramm et al. 2002). For instance, it was clear that there were significant woodland caribou populations travelling around the Caribou Mountains on a seasonal basis. If such specific knowledge is incorporated in decision-making processes in wildlife management, it will be helpful in estimating potential human impacts on wildlife habitat, such as from logging and oil and gas exploitation. Furthermore, it will lead to the clarification of the nature and scope of their interests in the forests, which will define a legal base for pursuing treaty rights. In this way, they sought to find a means of achieving a balance between traditional and non-industrial use of forests.

6.4.4 Politics of Co-Management

The forest co-management regime that started within the First Nations' traditional use area in 1995 was a new institution, involving the provincial government, the First Nations concerned, and industry. On the part of the government, as clearly stated in the 1999 MOU, the main purpose of this new institution was a means of developing the cooperation and consultation process to the First Nations. On the other hand, the First Nations saw this opportunity as an interim measure pending the settlement of their treaty entitlement claims. As Notzke (1995) coins the term *strategic* co-management, being aware that a gradual shift in the idea of social justice and environmental consciousness on the part of mainstream society could have positive or negative effects on Aboriginal resource management, the LRRCN/TFN did not miss a series of opportunities (see Chapter

3). Their goal of this co-management regime was to regain influence over their traditional land and to establish a sustainable forest-based local economy, which would ultimately contribute to their self-sufficiency in terms of cultural and economical aspects. In effect, the First Nations obtained significant benefits. First, this co-management regime was an incarnation of a formal relationship with the government in the form of the face-to-face dialogue that the government set up (Honda-McNeil 2000:90-92). This provided an opportunity for cultural exchange for both sides, whereby they could share views with each other (Treseder 2000:82-83). In particular, for the First Nations, this opportunity served as a vehicle for adaptation to the mainstream society. Second, co-management established a working relationship with the industry sector (Treseder 2000:81-83). Third, with timber disposition (timber quota in the First Nations' case), they had opportunities for economic development for their community members. LRR Forestry has now grown to earn over one million dollars a year, employing 250 band members, many of whom did not have jobs before (MacDonald 2005). Also, the fact that the First Nations has gained timber disposition would give an incentive for other parties to develop an equal partnership with them. Fourth, the establishment of the planning board for forest management gave the First Nations opportunities for reflecting their voices, views, and values of forest in decision-making processes (Treseder 2000:81-83).

However, after all of this, the government left this co-management regime. The 1999 MOU expired in 2001 and was conditionally extended until the summer of 2003, but after that the government has declined to renew this agreement. At present, the First Nations and the industry sector have nevertheless maintained their relationship; two Aboriginal forest companies (the LRR Forestry and TFN-owned Tipemso) and two Aboriginal economic development corporations (Askee and TFN-owned Netaskian Development Corporations) are hauling timber to mills run by Tolko and Footner Forest Products Ltd. (FFP) in High Level.

It was clear that both parties expected this co-management to serve as a means of conflict avoidance (Treseder 2000:83-84). Both parties must have desired to avoid such conflicts that were triggered between the government and the Lubicon Cree when the government endowed an FMA to DMI without any meaningful consultation with the band. Yet, on the part of the government, two successive cooperative management agreements were nothing less than a form of consultation and were not intended to provide more than that. As long as the government retained jurisdiction over land, the co-management process could not become co-jurisdiction over land. Nor did the decision-making process provide political opportunities to deal with treaty issues. Indeed, the 1995 MOU clearly states that co-management "is not intended to create legally enforceable obligation" (Alberta and LRRCN/TFN 1995:2), and the 1999 MOU further sets out that "this Memorandum is not an allocation process for renewable resources [forest resources] and Crown lands [public land], nor does it create any proprietary interests in renewable resources and Crown lands" (Alberta and LRRCN/TFN 1999:2; emphasis added). Also, one of the mandates of the 1999 MOU was to provide advice and recommendations concerning resource management to the Minister of Environment, and its capacity did not go beyond this limit. The final decision was the Minister's.

On the First Nations' side, however, there must have been expectations different from what these qualifications implied. Honda-McNeil (2000), who conducted interviews with the planning board members from all parties during the successive MOU periods, observes that the First Nations' side must have had a hope of achieving a high level of decision-making authority in the future, even a proprietary one in natural resources. Sometimes the subject of the board meetings went into political, treaty issues, and the meetings became a forum of complaints for First Nations. This made it difficult for government officers to maintain focus on subjects of the meeting. Their capacities were only to deal with operational matters, and they did not have decision-making authority over

political, constitutional issues. Consequently, it is hard to say that there was a mutually accepted sense of purpose. Some of Honda-McNeil's (2000:80) interviewees suspected that the government might be "buying time," without having to solve anything. All in all, when it came to a political subject, the government would walk away from dialogue.

If one looks at the policies that both the Memoranda of Understandings were based upon, he or she can immediately understand that the foundation of this co-management was very environmentally, socially, politically, and legally justified, reflecting changing social situations at that time (see Table 6.5). First, this co-management regime adopted the Alberta Forest Legacy (henceforth, Legacy). The Legacy is an answer to the Alberta Conservation Forest Strategy (AFCS) submitted by the Alberta Forest Conservation Strategy Steering Committee (AFCS-SC) in 1997. Through Three years' public consultation process, AFCS-SC recommended to the province ways of managing Alberta's forests on a long-term basis so that forests could continue to support diverse social and economic benefits perpetually. (The Legacy is based on other recommendations such as Alberta's Round Table on the Economy and Environment [Alberta Round Table on Environment and Economy 1993].) Based on the AFCS's recommendations, the province adopted in the Legacy the ideas of "ecosystem management," "integrated management," and "adaptive management" (Alberta. Environmental Protection 1998), which became major principles of the LRRCN's forest co-management regime. Therefore, this commitment by Alberta to realizing sustainable forest management had environmental and social justification. Second, Aboriginal incorporation into forest management planning processes were carried out in accordance with Direction Seven of the *1992* and *1998 National Forest Strategy*. This was backed by the nature and the scope of Aboriginal and treaty rights, which were found in three decades of court cases. Given that Aboriginal communities across Canada including the LRRCN/TFN have long suffered from alienation from the land through traditional use, securing Aboriginal access to their land and

enhancing their forest-based economy are politically justified. Third, and finally, in compliance with Section 35 of the *Constitution Act, 1982* and Treaty Eight, the government confirmed the respect for treaty rights, and this confirmation is legally justified. In this way, the forest co-management regime in northern Alberta had environmental, social, political and legal justification. On the part of the First Nations, the above-mentioned principles for sustainable forest management, Aboriginal participation in forest management, and the legal obligation and the respect for treaty rights matched their hope of trying to achieve a balance between traditional and industrial use of forests.

However, at the same time, these elements are sore points with the government. First, despite the release of the Legacy, the government still let forestry companies continue to focus their management plan on maximizing economic returns over short planning horizons (Schneider 2002:3). As discussed in section 6.3, from the middle of the 1980s onward, the government had made a lot of efforts to invite multinational companies to Alberta's boreal forests to pull the province out of recession. At that time, multinational corporations, including Japan's multinationals such as DMI and Alpac, were seeking to gain cheaper raw materials in politically stable countries such as Canada, and both parties' interest met together (Pratt and Urquhart 1994:74-80). The provincial government faced a challenge. If the government pressed an immediate policy shift on companies that were already established in Alberta, the government would end up by breaking up the partnership that it achieved with past efforts. An immediate forest policy shift would obviously result in challenges to the province itself and companies as well, as would even the immediate imposition of Aboriginal C&Is on industrial forestry (see section 6.4.3).

Also, taking into account the Alberta government's machinery, where forest tenures are bestowed by Alberta Sustainable Resource Development (SRD) and oil and gas tenures (known as subsurface mineral rights) are given by Alberta Energy, a re-organization of governmental machinery would be needed in order to realize effective integrated resource

management. This is another challenge to the government. Third, given that Aboriginal peoples have long suffered from resource exploitation within their traditional land by the mainstream society, incorporation of Aboriginal peoples in forest management would enhance their long-standing hope of achieving Aboriginal sovereignty. As discussed above, the government retained the final decision on resource management in their hands. Fourth and finally, treaty rights issues were to be put under the table on the part of the government. In the course of co-management, treaty issues were supposedly left off of the agenda although remaining as an underlying issue. Given their interpretation of the Natural Resource Transfer Agreement (within the *Constitution Act, 1930*), the Alberta government insists that it does not directly have a legal obligation to treaty Indians but only indirectly to the extent that the federal government can fulfill the Crown's fiduciary obligation.

Recently, the Alberta government released *First Nations Consultation Policy on Land Management and Resource Development* (henceforth, the Policy), which follows *Strengthening Relationships: The Government of Alberta's Aboriginal Policy Framework* issued in 2000. In the Policy, the province states that:

> Alberta will consult with First Nations where *Land Management and Resource Development* [e.g., forestry, energy, and water, fish and wildlife management] on provincial Crown land may infringe First Nations *Rights and Traditional Uses* [constitutionally protected rights to hunt, trap and fish, and uses of cultural, historic, and spiritual sites such as burial grounds and gathering sites]. (Both italicized terms are defined in the footnotes; the former not italicized, the latter italicized in original) [Alberta. Aboriginal Affairs and Northern Development (AAND) 2005:2].

Also, this Policy states that the province's consultation process "is intended to produce better communication, stronger relationships and easier resolution of issues between government and First Nations" (Alberta. AAND 2005:2). Further, the government hopes that these communications, relationships and resolutions should extend to industry and the federal government. These statements have a very legal and political justification.

According to the Policy, the Alberta government is in the process of making guidelines for the consultation process, which will deal with specific resource development activities, and four years after the implementation of this Policy, it will review its approach. Also, the government suggests two types of consultation processes: general consultation and relationship building, and project-specific consultation. I personally suspect that the province will not come back to the table and sit down with the LRRCN concerning co-management*. Of course, the LRRCN needs to continue to negotiate on resource management issues; however, it is likely that any contentious issues may be coped with under these two types of consultation processes. In the Policy document, there is no mention about co-management issues. It seems that when the First Nations focus their claims on legal and political aspects, the government dodges the contentious issues by taking other legal measures. This immediately reminds me of the following event. During the 1989–90 Environmental Impact Assessment (EIA) review panel concerning the building of the Alpac pulp mill, environmentalists focused their objection on the scientific aspect saying that chlorinated organics that would be discharged by the mill could have serious effects on human health (Pratt and Urquhart 1994:189-194). Trying to diversify the province's economy, the government was eager to attract the multinational company's foreign direct investment to the province. When the industry side successfully modified its mill design to reduce the level of effluent, the environmental considerations on the Athabasca River system were excluded from the review panel's terms and reference by the province. In other words, environmentalists relied on scientific critique so heavily that their claim was dismissed by the largest project proponent (the government) when

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* After having finished the final examination of my Master program, I was informed that the provincial government was showing some signs of talking to the LRRCN/TFN and the forest companies over the resumption of co-operative forest management (Dr. Cliff Hickey, a professor emeritus in the Department of Anthropology at the University of Alberta, personal communication, 8 December 2005).

scientific technology had advanced. Legal justice, political justice, social and environmental justice, what comes next? – Environmental market. Before I move on to this issue, I discuss some problems that the LRRCN/TFN have in their forestry operations in the next section.

6.4.5 Problems of AAC Levels

As of the summer of 2004, larger volumes of Annual Allowable Cut (AAC) are going to be assigned to the First Nations (Webb 2004a). The LRRCN is going to harvest a quota of 566,000 cubic metres of timber from F23 (306,000 cubic metres of deciduous, 260,000 cubic metres of coniferous timber), and TFN is about to harvest 115,000 cubic meters of timber from A9 (80,000 cubic metres [deciduous] and 35,000 cubic meters [coniferous]), which was intact as of the summer of 2004 (Webb 2004a). However, given that communities have values other than timber from their forests, as shown in the Aboriginal C&Is, these AAC volumes will possibly become a burden to the communities' subsistence and cultural life. A recent study shows that although a yearly stable volume of harvest of both coniferous and deciduous timber will provide the highest average job opportunities during the planning time of 200 years, it will cause a depletion of forest resources in the end. Even if ecological constraints are added, the model shows that both harvest volume and job opportunities will become exhausted (Krcmar et al. 2003). This problem comes from the province's traditional forestry policy, where once an AAC volume is set up based upon the land base of defined FMUs, the concerned forestry operators (FMA, Timber Quota and Permit Holders) are required to keep harvesting the authorized volume of timber from the forests over the planning horizon.

In section 16(1) of the *Alberta Forest Act*, an FMA is reached between the government and "any person to enable that person to enter on forest land for the purpose of establishing, growing and harvesting timber in a manner designed to proved a perpetual

sustained yield"(emphasis added). Also, as stated in section 19(2) of the Forest Act, if Timber Quota holders, such as the LRRCN/TFN, harvest timber over or under the authorized cutting volume during the quadrant (i.e., five-year harvest period as stated in section 18[5]), they will not be entitled to further timber disposition. That is, if a Timber Quota holder's cutting volume was under the authorized AAC volume in a quadrant, a portion of the authorized timber volume may be allocated to another forestry company or its AAC volume may be lowered by the government (Dr. Marty Luckert, a professor in the Department of Rural Economy at the University of Alberta, personal communication, 7 July 2005). Moreover, in the process of the AAC calculation, Aboriginal traditional land use is not taken into account (Ross and Smith 2002:6-14). These situations clearly show that a paradigm shift in forest policy from the sustained-yield to sustainable forest management would be challenging to the government. Therefore, in order to ensure that the forests can continue to support their culture, the First Nations feel the need to create a new management model, which goes beyond mere timber exploitation.

6.4.6 New Visions

With the traditional land use study (TLUS) and other research, it was clear that the southern escarpment of the Caribou Mountains and the northwestern escarpment of the Birch Mountains within F23 and A9 provided important habitats for caribou populations. Because the Aboriginal communities valued this species, they desired that those forests should be set aside; however, to reduce the AAC volumes will cause the reduction of the LRRCN's revenue from timber, employment and business opportunities. Also, they feel some pressure in that they are required to undertake non-declining harvests of both coniferous and deciduous species over the planning horizon. Is there any means of convincing government and industry of an ecosystem management approach so as to lower AAC volumes and protect species within an industrial forest management regime? Is it

possible for them to make up revenue loss if they could lower AAC volumes for those caribou habitats? In the summer of 2004 the First Nations came up with the following two options:

1) carbon sequestration under the Pilot Emission Removals, Reductions and Learnings (PERRL) initiative.
2) caribou habitat and conservation certificates (henceforth, *caribou conservation certificates*) based on the concept of the "High Conservation Value Forests" (HCVFs) of the Forest Stewardship Council (FSC) standards.

First, PERRL is a federal governmental pilot project of greenhouse gas (GHG) emission reduction projects, which provide Canadian companies and organizations with an incentive to combat climate change by buying verified GHG reductions and removals from qualified projects (Canada. Environment Canada 2004). At that time, the federal government was calling for proposals concerning agricultural and forest carbon sinks. Forests and agricultural soils absorb and store carbon dioxide from the atmosphere, and if selected, a project proponent would be paid for the amount of carbon dioxide that is estimated to be absorbed. The First Nations prepared a proposal for setting aside 130,000 cubic metres of timber within F23, which was estimated to store approximately 140,000 metric tonnes of carbon dioxide. Given carbon to be sold at $2.50 per tonne, gross revenue over three years would reach $337,000. However, this proposal was not successful.

Second, caribou conservation certificates are ones that the LRRCN/TFN are trying to develop by working with the World Wildlife Fund (WWF) and FSC Canada. If realized, these certificates will be part of the web-based certificates that the WWF has developed. For instance, if people who are environmentally conscious of forest conservation see the WWF website and want to protect caribou habitats and populations within F23 and A9, the WWF will sell them online conservation certificates saying that they are helping to protect some hectares of critical caribou habitat. In addition to the certificates, the purchasers will

be offered a tax receipt that allows them to deduct the amount of money they have paid from their income. In so doing, the LRRCN, as a forestry operator, could make money without cutting trees and protect important caribou habitat. Given that the LRRCN can sell certificates at $50 per hectare, the WWF would collect $10 for the operation of the website, and $20 would go to the FSC Canada (see below) to help support its conservation programmes. Then, the LRRCN would gain $20 per hectare as a forest tenure holder, who has set aside the forest. It is said that in most of the forests in Canada, forests increase the volume by one cubic metre per hectare per year (Messier et al. 2003). On the basis that a cubic metre of spruce was sold by $6 to $15, the $20 that the LRRCN would collect per hectare can offset for the loss of timber harvest (Webb 2005b). This kind of web-based certificate has been used to create "nature conservancies" in Amazonian rainforests by the WWF, but never in Canadian forests. This idea of the web-based caribou conservation certificates is still at a developmental stage, so that it depends on further research whether this project will work out.

The basic idea of the caribou conservation certificates within the F23 and A9 forests came from Principle Nine (maintenance of HCVFs) of the FSC standards. Let me explain the FSC standards. As mentioned in Chapter 3, forest certification has gotten to be an important tool for forest products companies to gain access to market because of the growing environmental awareness of the public. There have been several forest certification systems, such as the Sustainable Forestry Initiative (SFI), the Canadian Standards Association (CSA), and the Forest Stewardship Council (FSC). Certified wood products may cost more (between three to five per cent) at the retail level over non-certified equivalents (Mater 1999:7), but consumers can be convinced that their demand for wood products is not contributing to forest degradation. Here, I call these kinds of emerging markets created by the growing environmental awareness, environmental service markets. Forest certification is a good example of this.

Table 6.6 The Principles of the Forest Stewardship Council (FSC) (FSC 2003)

Principle #1: Compliance With Laws And FSC Principles
Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.

Principle #2: Tenure And Use Rights And Responsibilities
Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.

Principle #3: Indigenous Peoples' Rights
The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.

Principle #4: Community Relations And Worker's Rights
Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.

Principle # 5: Benefits From The Forest
Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.

Principle #6: Environmental Impact
Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.

Principle #7: Management Plan
A management plan – appropriate to the scale and intensity of the operations – shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.

Principle #8: Monitoring And Assessment
Monitoring shall be conducted – appropriate to the scale and intensity of forest management – to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.

Principle # 9: Maintenance Of High Conservation Value Forests
Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.

Principle # 10: Plantations
Plantations shall be planned and managed in accordance with Principles and Criteria 1–9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.

The FSC principles, as shown in Table 6.6, are ones that guide forest management assessments at the international level. These ten principles are very coarse in respect to the local level of forest management assessment; therefore, the regional FSC bodies have to develop science- and value-based regional standards for sustainable forest management. In January 2004, FSC Canada released the *National Boreal Standard (version 3)* (see Forest Stewardship Council Canada Working Group 2004), and hereafter forestry operators in the Canadian boreal forest region would be assessed based on this regional set of standards. Note that the FSC itself does not certify forest operations or manufacturers. An independent certification body accredited by the FSC (third-party assessment team) does inspect a company's forest management unit to see if the forest company complies with the FSC principles for responsible forest management (Forest Stewardship Council 2003). If it does, the accredited certifier issues a certificate for the operators, and the certified operators can claim their wood products come from a responsibly managed forest. The LRRCN actually contributed to the development of the *National Boreal Standard* and found that the FSC principles could provide them with a foundation for a new forest management model. The recognition and the respect of indigenous peoples' access to the land and resources for their traditional uses are embodied in Principle Three. Principle Six takes into consideration environmental impact of forestry operations; consequently it requires the establishment of conservation zones and protection areas so as to safeguard rare, threatened and endangered species and their habitats. What most attracts the First Nations is Principle Nine (maintenance of HCVFs). The HCVFs are those that possess one or more of the attributes as shown in Table 6.7.

Table 6.7 Attributes of the High Conservation Value Forest

Attributes of the High Conservation Value Forest (HCVF)
a) Forest areas containing globally, regionally or nationally significant: i) Concentrations of biodiversity values (e.g., endemism, endangered species, refugia); and/or ii) Large landscape level forests, contained within, or containing the management unit, where viable populations of most (if not all) naturally occurring species exist in natural patterns of distribution and abundance.
b) Forest areas that are in or contain rare, threatened or endangered ecosystems.
c) Forest areas that provide basic services of nature in critical situations (e.g., watershed protection, erosion control).
d) Forest areas fundamental to meeting basic needs of local communities (e.g., subsistence, health) and/or critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).

Based on Forest Stewardship Council Canada Working Group (2004)

For now, the LRRCN has not yet decided whether they will apply to the FSC for certification and get their forests certified. Each principle in the FSC standards is not a stand-alone principle, and in order to have forests certified under the FSC, the First Nations have to develop forest management plans which accommodate all ten principles' considerations as much as possible. However, the LRRCN did decide to borrow the concept of "HCVFs" as a tool to develop their forest conservation strategy and create new markets for environmental services. Note that the web-based certificates that the LRRCN desires to develop and the FSC certification are very different. While the FSC certification is the one that regulates forestry operations, as noted above, the caribou conservation certificates are another way of making money. To do so, the concept of HCVFs would be a very useful tool for protecting values that LRRCN's forests have. Again, the aim of the LRRCN/TFN is to protect forests in the Caribou and Birch Mountains that harbour caribou populations and habitats in the name of HCVFs. In 2004, with the financial support of the

Canadian Boreal Initiative (CBI), which is an organization working with other conservation organizations, First Nations and industry, the First Nations asked forestry consultants to undertake analysis to identify and document attributes of high values worthy to be conserved within F23 and A9. The result of the HCVF analysis showed that attributes found within the forest management units were ecologically valuable, and then, currently, they are in the process of developing a forest management plan co-operatively with the environmental organization, the Canadian Parks and Wilderness Society (CPAWS), and other forestry consultants.

Having sought to create a forest management model that would suit their forest conservation needs, eventually the First Nations have begun to work on the creation of a new environmental service market, which is thought provoking. As for forest certification, the impetus for forest certification originally came from dissatisfaction and disappointment with public forest policy, saying that relying on government might not produce the desired results. The FSC was finally created by transnational environmental and social groups led by the World Wildlife Fund (WWF). Forest certification itself is still in its infancy (the first certifying organization – the SmartWood Program – was established in 1989, and the FSC in 1993.), and its impacts on society are still unknown. However, as Cashore et al. (2004) insist, the concept of forest certification – where non-state authority could push society towards the notion of sustainable forest management by driving markets – is very unique. In the same way, what they call the web-based caribou conservation certificates have the possibility that the external economic force backed by a transcending environmental movement will have a positive impact on local communities. The First Nations decided to seek to accommodate new values from outside of their communities, nationally and internationally through environmental markets. Old cultural values emphasizing the natural environment may be re-shaped to conform to those of the external world, which may in the end reshape the communities' cultural identity. They also are

considering the feasibility of ecotourism within the certified forests. By diversifying strategies, the two First Nations have just embarked on a new venture to continue seeking to gain a better position in the mainstream society and a better share of land, resources, and environmental services.

6.5 Comments on Forest Management Planning

6.5.1 Introduction

Before I move on to the conclusion, I would like to discuss a couple of issues associated with forest management and conservation that the LRRCN/TFN are going to undertake. I believe the following discussion will contribute to further understanding of Aboriginal forestry. I have discussed that the First Nations have been seeking to create a forest management model that would suit their specific needs (ecological, social, and cultural sustainability). First, analyzing the following four approaches for forest management, I discuss the way the LRRCN have decided to use the concept of HCVFs as a tool for the creation of a new environmental service market:

1) the approach set out by *Alberta Forest Conservation Strategy*,

2) the approach set out by *Alberta Forest Legacy*,

3) a TRIAD approach, and

4) Forest Stewardship Council (FSC)'s standards (principles and indicators).

Then, I discuss the way TEK could be incorporated into forest management planning. Incidentally, my professional background in forestry in Japan contributed to my understanding of Canadian forestry but sometimes made me confused. This is because Japanese forestry, in contrast to Canada, is focused on man-made versus natural forests. Taking into account my personal opinions and cultural difference in forestry, I intend to proceed with this section.

6.5.2 Philosophy of a Zoning Approach

The *Alberta Forest Conservation Strategy* (*AFCS*) proposes that the forest landbase be managed according to a range of intensities of use (Alberta Forest Conservation Strategy Steering Committee 1997). Following the AFCS proposal, the *Alberta Forest Legacy* (*AFL*), which is the statement of Alberta's commitment to sustainable forest management, defines four categories of management intensities (Alberta. Environmental Protection 1998):

1) *Extensive management*: The majority of forest areas supporting a range of uses (e.g., recreation, tourism, energy, timber, grazing, and precious metal)
2) *Heritage*: Portions of the land base protected by instruments (e.g., Alberta's Special Places Program)
3) *Facility*: Very localized areas for tourism, industry-related construction, or community development (e.g., pipelines, roads)
4) *Enhanced management*: Some forested areas used for particular purposes (mostly timber production). In order to increase the productivity of the stands, silvicultural activities, such as thinning, introduction of exotic species, tree-improvement and fertilization, are used (Alberta. Enhanced Forest Management Task Force 1997) through comprehensive forest management plans including public involvement.

The third category (facility) is less relevant to forestry operations, and so I exclude it from my discussion. Then, there remain three categories. Similarly, the FSC Standards include principles concerning *conservation zones* and *protection areas* (Principle Six) and *plantations* (Principle Ten) in addition to the bulk of the forests being managed extensively (FSC 2003). These three-part systems may be thought of as being analogous to the concept of the TRIAD (as for the details, see below). Simplifying these classifications (AFCS, AFL, TRIAD, and FSC standards), I venture to match categories of one classification to

those of the others in Table 6.8. They look similar in terms of adopting ecosystem management as the basic principle; however, there are different management philosophies behind the different management approaches. I speculate that these philosophical differences might have led the LRRCN to the adoption of the concept of HCVFs. In short, these four approaches are not perfect management approaches for the LRRCN. At present, Principle Nine (maintenance of HCVFs) of the FSC standards (not FSC standards as a whole) is a preferable tool for them. I discuss each approach in due order.

Table 6.8 Comparison of Zoning Approaches

Management Intensity (Proportion)	Alberta Forest Conservation Strategy (1997)	Alberta Forest Legacy (1998)	TRIAD/ QUAD*	FSC's National Boreal Standard ver. 3 (2004)
Zero (Small portions)	1. Protection (n/a %)	1. Heritage (12%) (in compliance with the "made in Alberta" strategy Special Places 2000)	1. Protected area (12%)	1-1. Conservation zone & Protection area (n/a %) 1-2. High Conservation Value Forest (HCVF) (n/a %)
Low (The bulk of the forest)	**2. Extensive Management** (n/a %)	**2. Extensive Management** (n/a %)	2. Semi-natural area (74%)	2. **Responsible Forest Management**** (n/a %)
High (Small portions)	3. Intensive Management (n/a %)	3. Enhancive Management (n/a %)	**3-1.Plantation (Intensive)** (10%)	3. Plantations (<5%)
			3-2. Super-intensive Management (4%)	
	4. Facility (n/a %)	4. Facility (n/a %)		

* Based on the allocation of Meissier et al (2003) ** The FSC does not name it specifically.
NB Terms referring to management intensities and names of areas to which management intensities are being applied are jumbled up in this table. I dare to compare categories of four classifications. Figures represent proportions of the total forest management area, and categories in bold means ones given priority.

i) Alberta Forest Conservation Strategy and Alberta Forest Legacy

First of all, the LRRCN appreciates the AFCS approach in that it was made democratically based on the large-scale public consultation and includes ecosystem management, but on the other hand, the LRRCN is not happy with this approach because *AFCS* does not include many Aboriginal matters. The Steering Committee of the Alberta Forest Conservation Strategy (AFCS) identified Aboriginal issues and their resolutions as important elements of the strategy. In order to classify these matters, an Aboriginal Issues Working Group (AIWG) was established, and issues raised by Aboriginal communities during the group-led consultation were compiled in the report *Aboriginal Perspectives on Forest Conservation* (Alberta. Aboriginal Issues Working Group 1995). However, those considerations were not fully addressed in the AFCS, nor in the Alberta Forest Legacy. Consequently, *AFL* based on *AFCS* is not palatable to the LRRCN.

ii) TRIAD: Plantations in Small Portions Given Priority

The concept of the TRIAD was first proposed by Seymour and Hunter (1992) and is based on a scenario whereby the forest area is divided into different management units among competing demands so that each different set of goals and objectives is being implemented in each unit at the same time. All forms of land use may be carried out in three parts.

1) Areas with little or no resource use by people except low-intensity recreation,
2) Areas in which modest resource use is allowed based on ecosystem management, and
3) Areas in which intensive commodity production (e.g., timber production) is conducted.

Hunter and Calhoun (1996) liken the above three areas to the major environmental ethics. Zone One corresponds to a protected area of a Romantic-transcendental preservationist

like John Muir. Zone Three consists of plantations that the wise-use advocator Gifford Pinchot and other conservationists would surely agree with, and Aldo Leopold of Evolutionary-Ecological Land Ethic would feel sympathy for Zone Two to avoid polarizing people's perspective of the human-nature relationship. In the case of the LRRCN, subsistence activities will be conducted in Zones One and Two. Among Canadian siliviculturalists, Messier et al. (2003) propose a QUAD approach by further dividing Zone Three into *intensive* management and *super-intensive* forestry areas. Traditional intensive forestry interventions are used to increase wood production in the *intensive* management area; in the *super-intensive* areas, priority is given to wood fibre production through short rotation with the use of fast-growing species such as hybrid poplar and larch. For the sake of argument, Messier et al. (2003) divide Canada's boreal forests into four categories (protected, semi-natural [extensive management], plantation [intensive management] and super-intensive areas) and allocate them to 12, 74, 10 and four per cent of the total landmass, respectively (see Table 6.8). Based on recommendations made by the World Commission on Environment and Development (World Commission on Environment and Development 1987), Canada has set a protected area target at 12 per cent of its landmass in an attempt to accommodate more protected area. The 12 per cent that Messier et al. (2003) use may be derived from this national target. Although these four percentages are aimed at the whole national boreal forest, these figures can be applied to local forest management areas such as local FMA areas. Furthermore, Messier et al. (2003) apply their land allocation model to the actual productive Canadian boreal forest (140.5 million hectares), which is estimated to produce the value of 141 million cubic metres of wood per year. Using Messier et al.'s figure, we can calculate possible productivity and arrive at a new percentage for protected areas. If 13 per cent of land mass is allocated to intensive and super-intensive management areas, with the use of poplar hybrids, theoretically they can produce approximately 75 million cubic metres of wood. Under the

existing circumstance, if 72 per cent of forest areas were entered into extensive management, they could provide approximately 90 million cubic metres of wood production. In total, 85 per cent of the land mass can produce approximately 166 million cubic metres, which is well above current production; therefore, no less than 15 per cent of forest areas can be protected. It should be clear that a TRIAD approach is suggestive of the emphasis on plantation and the use of fast-growing species in an attempt to create a larger landmass of protected areas. If prioritised under the concept of TRIAD, three management types are ordered as follows: intensive management > extensive management > protection.

The LRRCN/TFN were considering implementing a plantation plan until 2004, but they found that it was not a feasible project because plantations would not pay off and could affect community members' subsistence activities. Consequently, a TRIAD approach (including plantations) would not be a preferable approach for the LRRCN's forestry operations.

Incidentally, I speculate that the concept of the TRIAD was created particularly in the context of North American forestry, where because of natural forests still remaining in large tracts of land, forestry operations have been conducted in the form of exploitation of natural forests on a large scale. A recent need to establish more protected areas under the pressure of the international environmental movement might have pushed the concept of plantation to the forefront of the sustainable forest management movement. I speculate that in European countries such as Germany, France, and Scandinavian countries, and Japan as well, whose forestry operations have long been focused on plantations, the establishment of extensive, intensive and protected areas have long since been conducted although the term TRIAD has not been used.

iii) FSC: The Bulk of the Forests Given Priority

Contrary to a TRIAD approach, what the FSC is most concerned with is the

"working forests," which is the bulk of the forest management units and should be harvested under ecosystem management. However, it should be wise to think that ecosystem management is not a perfect way of managing forests because there must be inherent unpredictable events in natural processes. Then, in order to reduce risks arising from forestry operations and to maintain biodiversity, portions of forest must be protected. Principle Six requires the establishment of protected areas, yet there is no clear indication of how much should be protected. As for plantations, Principle Ten excludes the conversion of natural forest to plantation in order to avoid expansion of plantations into natural forests. If those who desire to have their forests certified converted more than five per cent of the natural forest into plantations, they would not be certified under the FSC (see Principle Ten [and Indicator 6.10.2 as well] of the *FSC National Boreal Standards*). Even the principle does not encourage the introduction of exotic or genetically modified species for plantation (see also Indicator 6.8). (However, conversion of abandoned agricultural land and other degraded ecosystems into plantations can be allowed.) It should be clear that the FSC standards are primarily designed to provide good standards of *forestry* operations being conducted in the bulk of the forested area (Schneider 2005). The concept of full protection is the second priority under the FSC standards, and plantation is the lowest priority. Therefore, under the FSC's concern, three management types are ordered in priority as follows: extensive management > protection > intensive management.

As mentioned above, each principle in the FSC standards is not a stand-alone principle, and in order to have forests certified under the FSC, the First Nations have to develop forest management plans which accommodate all ten principles' considerations as much as possible. At present, it is uncertain that compliance with all principles will help in developing a suitable forest management model for the LRRCN. Therefore, the application to the FSC certification is a pending issue.

iv) High Conservation Value Forests (HCVFs)

Then, borrowing the concept of HCVFs from the FSC standards, the LRRCN/TFN decided to preserve forests within the Caribou and the Birch Mountains. There is a concern that establishing HCVFs is not a panacea for forest conservation (Schneider 2005). This is because the FSC's primary concern is to bring about the highest standards of forest management in defined forest management areas. Also, there is some doubt that the establishment of a portion of forests (with high values worthy to be conserved) on a local scale does not ensure conservation of the forest landscape on a broad scale (Cabarle et al. 2005). However, the identification of HCVFs can be used to such an extent that it helps develop better forest management plans on a local level and prevent further loss of critical and threatened habitats from the expansion of intensive human disturbances and inappropriate forest conversion into monocultural plantations.

Thus, this is why the LRRCN/TFN have decided to use the concept of HCVFs as a tool for the making of better forest management plans. While I discussed the way the LRRCN has reached the HCVF concept in Section 6.4.6 from the viewpoint of the creation of a new environmental service market, I have discussed it in this section in light of forest management philosophy.

6.5.3 Approach of Environmental Groups: Protection Given Priority

Incidentally, the main objective of environmental groups is to establish protected areas, which include all types of representative forests that exist within the given landscape. For instance, northern Alberta has six *Natural Subregions* in the *Boreal Forest* and two *Natural Subregions* in the *Canadian Shield*, as shown in Table 6.3. Environmental groups insist that each *Subregion* must contain a certain percentage of protected area (e.g., 12 per cent) (Alberta Wilderness Association et al. 2001). Then, they hope that the remaining forests will be managed under the highest level of standards, such as ecosystem

management. If prioritised according to environmentalists' concerns, three management types are ordered as follows: protection > extensive management > intensive management.

It should be clear that different philosophies concerning forest management are competing with each other. An approach which is accepted by some stakeholders is not usually accepted by other stakeholders. Recently, some environmental groups have begun to think that whole forest landscape is not necessarily protected from industrial activities. Environmental groups such as the Canadian Parks and Wilderness Society (CPAWS) believe that keeping a balance between forest integrity and economic values is important. In this sense, CPAWS is standing with the First Nations who are trying to achieve a balance between traditional and non-traditional use of forests (Schneider 2005).

6.5.4 The Incorporation of TEK into Forest Management Planning

Finally, I would like to discuss possibilities of the integration of traditional ecological knowledge (TEK) into *forestry* operations. Where forestry operations could affect ecologically sensitive sites and wildlife populations, TEK will help develop forest management planning. I once suspected that there were few elements of TEK from hunters that could be used to modify silvicultural techniques (e.g., the act of growing and improving trees, making forested stands and harvesting timber) because when it comes to forestry, I was paying too much attention to the arts of managing "man-made forests." It was not until recently that I realized that, here in Canada, managing "natural" forests is the most important aspect. As noted above, Japanese forestry, in contrast to Canada, is focused on "man-made" versus "natural" forests; I unwittingly equated forest management with the art of managing man-made forests. Finally, I have recognized that TEK can be used not only for monitoring the health of natural forests, but also for silvicultural operations for commercial purposes.

Let me explain about this issue by starting from wildlife management cooperatively

being conducted by government and Inuvialuit communities. Under the Inuvialuit Final Agreement (IFA) of 1984, programmes for wildlife management and conservation were created. With assistance of the Fisheries Joint Management Committee (FJMC), which is one of the Renewable Resource Committees under the IFA, scientists and Inuvialuit hunters work together for research on renewable resources. The FJMC functions as an organization to provide recommendations on fisheries management (this includes sea mammals) to the federal Department of Fisheries and Oceans.

There were reported interesting cases where TEK served better than scientific ecological knowledge (SEK) in research and decision-making processes (Iwasaki 2001). For instance, with the need to estimate its population size, federal scientists tried to catch a certain number of whitefish, but they could not. Then, scientists left it to Inuvialuit hunters the next year, and they successfully caught enough whitefish to survey. For another example, at the beginning of the research, scientists estimated that the whitefish population was at a low level, but Inuvialuit hunters strongly disagreed with their estimations. As scientific research followed, it was clear that Inuvialuit hunters' observations were right. This is a concrete example where scientific data eventually proved the reliability of TEK. Third, when the government proposed the introduction of game quotas, elders opposed it. Rather, they preferred harvest levels that were adjustable depending on the hunters' past years' harvests. They were also concerned that quantified quotas might bring about to their communities a sense of commercial fisheries. The adjustable harvest levels eventually worked out in managing the fisheries resources.

These Inuvialuit cases are ones where fishers' traditional knowledge on fish species immediately served both for harvest of fisheries in wildlife management and for conservation programmes. As for Aboriginal forestry, however, the way TEK can be utilized cannot be thought of as being in the same way as fisheries management. This was a stumbling block for me. I once speculated that it was knowledge on trees that could

contribute to the art of forestry operations ranging from silviculture to timber harvest, which I thought was the main aspect of forestry because my focus of forestry was on management of man-made forests. Narrowly focusing the scope of forestry operations on man-made forest management, I was looking for TEK on *trees*, which I thought could only be utilized for forestry operations, rather than hunters' perspectives in a broad sense. This is because I thought they were people who have been harvesting game, not trees for a living. As discussed in Chapter 5, Canadian Aboriginal peoples have been hunters and gatherers, not those who are growing trees and harvesting trees for a living. This means that, at least in northern Alberta, forestry is a quite new venture for them. Also, although I admitted in Chapter 5 that they were "forest people" who were modifying forests for hunting and trapping (and whose burning practice became a driving force of the succession of boreal forests), I questioned how much of their knowledge on forest modification could contribute to modern forestry operations. Because Indian burning has been prohibited under the current provincial forest policy, I thought it would be impossible to revitalize the vanishing practice of Indian burning within ordinary forests (Green Areas) and use it for forestry. (Subscribed burning is conducted in limited areas such as the Banff National Park.). I have raised an example of Japanese traditional forestry in Chapter 1. Before modern forestry was introduced in Japan, knowledge and techniques of forestry had been created and passed down traditionally (Totman 1989). Such knowledge and techniques varied depending on localities, reflecting physiographical, climatic, and vegetational differences of specific local areas. I expected such *tree growers*' knowledge and techniques of commercial forestry from Canadian First Nations. Accordingly, I thought hunters' knowledge would not be applied for modern commercial forestry operations.

However, if the scope of forestry is widened to include management of "natural" forests, TEK of Aboriginal hunters can be used a lot for *forest* management. As raised by Natcher & Hickey (2002), it is hunters' perspectives of *wildlife habitat* that can contribute

to "natural" forest management (see Criteria 1 on page 145). Elders and hunters are knowledgeable about sensitive wildlife habitats and migration routes. With their knowledge, it is possible that these important habitats and migration routes are taken out from timber production sites. Also, through their everyday observation of wildlife populations, it is possible that forest health is monitored. Natcher and Hickey (2002:356) clarify that community members value "healthy population of bison in the Caribou [Mountain] lowlands and drainages and raise as an indicator "[to] reduce timber harvesting along the Caribou [Mountain] slope to maintain lowland bison habitat." Even though trees themselves do not come under survey, forest integrity can be monitored through many aspects of the forests, such as biodiversity of bird species, frequency of outbreak of pest insects and tree diseases, year-to-year population change of small mammals such as rodents, and so forth. Therefore, the richness of wildlife habitat can be used as an indicator for monitoring of forest health. Also, hunters' desire of secure access to lands and resources will urge forestry operators to modify silvicultural methods (e.g., the prohibition of scarification following harvesting as it impedes human and animal travel, [Natcher and Hickey's (2002) Criterion 2]). As for a question as to how to combine scientific and traditional knowledge in the process of forest management planning, further research is needed from both scientific and anthropological point of views.

6.6 Conclusion

In this chapter, I have developed my discussion on the ventures of the LRRCN/TFN, mainly forest co-management, in an attempt to grasp Aboriginal forestry in a larger, historical framework. Often called the "delayed frontier," northern Alberta remained relatively intact until recently, compared to other parts of Canada; however, after the turn of the twentieth century, northern settlement and industrial development gathered

momentum, and industrial activities surged into this region. Treaty Eight signed in 1899 between northern Aboriginal communities and the Crown ushered in a significant transformation in northern Alberta's economy. Social, economic and political transformation by the external world brought about a lot of changes to northern Aboriginal communities. Alberta's economy was, and is, driven by resource-dependent industry, such as agriculture, forestry, and the oil and gas industry. Resource development inevitably involves modification or degradation of the natural environment, which immediately makes it difficult for Aboriginal communities to continue to rely on traditional lands for traditional subsistence. Accordingly, First Nations in northern Alberta, including the LRRCN, had to struggle with dispossession of Aboriginal traditional land, the difficulty in access to natural resources, and alienation from the mainstream society's economy and politics.

For these last three decades, social, legal, and political situations surrounding the LRRCN have significantly changed. The growing environmental movement has promoted the concept of sustainable development in the provincial forestry circle. The adoption of ecosystem management of forests has environmental and social justification. Constitutional protection of Aboriginal and treaty rights and recent court cases have provided Aboriginal groups with the political clout to claim their right to pursue traditional life on the land. Also, the incorporation of Aboriginal communities into forest management regimes grew to have political and moral justification. The province can no longer ignore the ecological integrity of forests, treaty rights, and Aboriginal participation in resource development. Similarly, the industry sector came to regard Aboriginal groups as a partner of their enterprise (e.g., Anderson 1997; Hickey and Nelson 2005). Taking advantage of these signals of social change, the LRRCN/TFN has entered into the co-management regime for the forests within the land of their traditional use as "an interim means" pending the settlement of their treaty entitlement claims. Currently, the

government has left the co-management regime, but still the First Nations and industry maintain their working relationship. Within this forest management regime, they may create an Aboriginal version of a forest management model based on their viewpoint of forests. At the same time, they need to continue to negotiate with government. As long as the province retains the jurisdiction over the land, authority transfer will not be realized. The First Nations acknowledge this point. They are negotiating for a fair share of land and resources, and a better position in the mainstream society within the existing political framework. However, Aboriginal claims to protect their traditional ways of life could challenge the existing framework of the state, because of their fiduciary relationship, which may affect the existing resource management framework. Moreover, because of the growing environmental movement which may convince the public of the need for a different forest management regime, there may arise a movement towards a unique relationship to nature (Clark 2002). With change in the external society, there are good possibilities that the First Nations can negotiate for a better position in the mainstream society. Although resources within the communities, such as human resources, are limited, by diversifying strategies to negotiate with the external communities, the First Nations could muster political opportunities from court decisions, financial and research assistance from environmental groups and research institutes, and knowledge and techniques from the global economy. Therefore, the First Nations need to incorporate a broad viewpoint into their strategies to gain a better position in, a better share with, and cooperation with the mainstream society.

7. Conclusion

Aboriginal forestry includes both new and old aspects in its framework. Its novelty lies in a way of engaging the mainstream society through co-operative resource management. Through this new institution, Aboriginal peoples as *forest peoples* (Chapter 5) may incorporate the arts of foresters into their traditional lifestyle. On the other hand, this resource management regime still stays within an extension of the long-standing, historical relationship to the Crown. As discussed in Chapter 3, even in a modern day court case pertaining to Aboriginal access to forests, the court's scrutiny into the nature of the Aboriginal relation to the Crown goes far back to an eighteenth century peace treaty. In the course of the Aboriginal interaction with Euro-Canadian societies ranging from the fur trade starting shortly after European contact to the building of the pipelines of today, Canada's rich natural resources have been a determining factor in shaping its relationship (Chapter 2). It was the richness of natural resources that established a partnership between both parties, but at the same time, it was the richness of natural resources that relegated Aboriginal peoples to a marginalized position in Canada's societies.

As a frontier, Canada's landscapes have provided equivocal images for non-Aboriginal peoples. On one hand, its land, as a resource frontier, attracted, and still attracts, many people to various parts of the resource hinterland. Seemingly unlimited natural resources made them contemplate endless economic growth that they might be able to enjoy. Economic expansionists believed that as long as humans wisely used renewable natural resources within the limit of resilience of nature, they could continuously exploit the resources in pursuit of their better lives (Section 4.2.3). On the other hand, Canada's land, particularly the north, has provided a national foundation myth for urban, southern Canadians, equating the notion of being a northern nation with man's toughness and supremacy (Section 4.4.2). This idolatrizing of a wilderness was the parallel to the American frontierism, in which people tended to see nostalgia for a free, true, and

fortitudinous frontier life in a remote, seemingly "untouched" wilderness (Section 4.4.1). This kind of *a sense of place devoid of place* hid the reality of the place and laid a foundation for an environmental movement that has lasted until today. Neither frontier image was palatable to Aboriginal peoples. As time passed by, fur became no longer important. Aboriginal communities in the *resource frontier* were in the way of the westward settlement and resource development. In the *romantic heartland frontier*, the existence of Aboriginal peoples was totally absent from settlers' perception.

Because of the nature of a *staples-dependent economy*, the governmental machinery was expected to figure in the frontier economy as the centralized political and financial organization (Section 2.2.2). Unfortunately, at the time of Confederation when Canada came under the sweep of governmental hegemony, Aboriginal peoples were not recognized as worthy partners. Yet, owing to a long history of commerce with Euro-Canadians, Aboriginal peoples were not driven away with nothing. Through treaty making processes mainly during the late nineteenth and the early twentieth centuries, most Aboriginal peoples "surrendered" title to the land and in return, were provided with reserve lands and hunting and trapping rights on respective conceded lands (Section 2.3). This was the beginning of another phase of a long-standing history of the relationship to the Crown and ushered in the ongoing struggle with land dispossession by Aboriginal peoples. Since Aboriginal peoples have a close tie with the land, modification and degradation of the natural environment caused by the extensive scale of resource exploitation made it difficult for them to continue their subsistence on lands which they had occupied for generations.

However, these last three decades have signalled significant changes happening to circumstances surrounding Aboriginal groups. The remarkable intrusion of environmental concerns into the political arena was made in the 1970s (Section 4.3). There arose a general feeling of unrest among the public because environmental

degradation caused by continuous expansion of industrial urban societies had begun to show some signs of human crises. The club of Rome's *The Limit to Growth* in 1972, the so-called Brundtland Report in 1987, and the Rio Earth Summit (UNCED) in 1992 were all good examples of the environmental movement on a global level. The notion of sustainable development has permeated various levels of society. Interestingly and inevitably, the re-valuation of the human-nature relationship has led to the re-valuation of the presence of Aboriginal populations, who are thought to have lived harmoniously with nature. I have discussed, however, that forest peoples who actually made a home in nature were those who dynamically modified the environment in which they lived (e.g., Indian burning, Section 5.2). In any event, it is sure that changing public awareness of the environment has begun to provide Aboriginal peoples with a political realm to appeal their struggle with land dispossession. Partly, this shift in the public attitude towards nature has been backed up by the rising standards of living in developed countries for these three decades. In the course of the maturing of industrial urban societies, the dominant social class has begun to seek values other than materialistic ones, and their lifestyle has shifted to the leisure-oriented, where people are eager to escape from urban-industrial complexes and willing to enter wilderness landscapes (Section 4.4.1). The nineteenth-century transatlantic romantic naturalist John Muir's spirit is unabated in modern times' people's perception of nature. What is different from a hundred yeas ago is that environmental groups have come to be a new social force in Canada's politico-economic stage, which once was dominated only by the industrial sector, such as the state and capitalist labour. Moreover, being pushed by the environmental movement, Aboriginal groups are becoming an influential force in the politico-economic stage, the rise of which has signified a challenge to the existing political and industrial framework (Section 2.4).

What more reinforces claims of Aboriginal groups are a series of court cases of these three decades. The Supreme Court of Canada has been willing to address and define

the nature and the scope of Aboriginal use and access to land and resources, on which they used to live. Moreover, it was treaty that has made it possible to bring to the court their claims of struggle to sustain their cultural autonomy and traditional way of life. Recent court rulings defined that treaty represented the exchange of solemn promise between the Crown and Aboriginal peoples, and that the honour of the Crown was always at stake so it must not fail to fulfill its promises (e.g., *R. v. Sparrow, [1990]*, Section 3.3). One of the most important points is that through these social changes, Aboriginal peoples have mustered legal justification for the continuance of traditional subsistence based on hunting, trapping and fishing on land and forests, which are an integral part of their culture. Also, what made it possible for them is a long-standing relationship to the Crown, the long-term struggle to sustain their traditional (cultural) lifestyle, and struggle to regain their influence over the land.

What needs to be emphasised is that in forest management and forestry, the above-mentioned two elements (social change mobilized by growing environmental awareness and gradual confirmation of the nature and scope of Aboriginal and treaty rights) are tied together. First, the concept of sustainable development was taken into forest management regimes (Section 4.3.2). Changing attitudes towards forests brought about the necessity of the incorporation of multi-stakeholders' views and values in forest management planning processes. Surely, Aboriginal communities are one of the most important stakeholders, given that more than eighty per cent of Canada's Aboriginal communities live in the forested area. At the same time, Aboriginal peoples are not just ordinary stakeholders in that it was acknowledged that the implementation of the defined Aboriginal and treaty rights by the Supreme Court needed to be translated into forest management regimes and practices (Section 6.4.3). Being aware of this gradual shift in the idea of environmental, social justice and legal legitimacy on the part of the mainstream society, also being aware that these may or may not have positive effects on them, not a

small number of Aboriginal communities strategically embarked on forest management (Section 6.4.4). As long as governments retain jurisdiction over land, perfect co-jurisdiction over forests is impossible. Consequently, many of Aboriginal communities' forestry efforts have taken the form of co-management with non-Aboriginal parties involving the state and industry. To summarise, this study concludes that while Aboriginal forestry has an old element in that this is an extension of the long-standing relationship (or negotiation for natural resources with) to the Crown, Aboriginal forestry is a new institution in that this is a new means of securing a better position in the mainstream society. Moreover, this new venture has been shaped by the mainstream society's shift in attitude towards the human-nature relationship.

Another achievement of this study is, based on the above-mentioned viewpoints, the examination of the forest co-management process in northern Alberta, which involved government, First Nations, and industry (Chapter 6). Although the province declined to renew the term of co-management, two First Nations, the Little Red River Cree Nations (LRRCN) and Tallcree First Nations (TFN) and industry are maintaining a working relationship that was created during the previous three-parties co-management period.

Having lagged behind more accessible places in Canada, northern Alberta was opened up at the turn of the twentieth century. A surge of settlers and rampant industrial development were prepared by Treaty Eight (1899) and other governmental assistance such as development of transport and infrastructure systems (Section 6.3). Immediately, this meant the beginning of a new phase of northern Alberta history, when northern Aboriginal communities would struggle with alienation from the land and resources that they used to enjoy, difficulties in sustaining their cultural autonomy, and lack of concern for treaty rights by non-Aboriginal societies.

In the 1990s, however, having gone through the bitter period of conflicts involving government, industry, environmentalists, and Aboriginal communities in northern Alberta,

the government was about to show some signs of shift in forest policy (Section 6.4). The concept of sustainable forest management (SFM) appeared in the provincial policy framework. This provided Aboriginal communities, who had long been suffering from environmental degradation in the areas on which they had relied for subsistence, with political opportunities to claim protection of their environment. The notion of sustainability is not only applied to the ecological integrity, but goes for the continuance of culturally autonomous Aboriginal communities. At the same time, the province began to seek a means of consultation with Aboriginal communities with respect to resource development. The First Nations did not miss these opportunities. While continuing ongoing treaty entitlement claim processes with the Crown (the federal government), LRRCN/TFN entered into the forest co-management process as an interim measure of retaking "a fair share" of natural resources with the mainstream society within the existing political and legal framework. (This is because the First Nations view Treaty Eight as "a solemn commitment to share use of the territory" with non-Aboriginal societies.) What gives Aboriginal communities a unique position is that Aboriginal claims to protect their traditional ways of life could immediately challenge the existing framework of the state, because of their fiduciary relationship. Also, Aboriginal claims may affect the existing resource management regime (e.g., industrial forestry), because of the incorporation of treaty rights into any management plan, and would strike at the heart of the public, because of their unique, cultural relationship to nature. Although the province incorporates environmental, social, and legal justice into the text of the forest and Aboriginal consultation policies, as it stands, an immediate policy change would not be realized. The government has historically been a supporter of the resource- dependent economy in resource hinterland. The province of Alberta so relies on the resource-based industry that

it earned approximately $39.8 billion, or 23.4 per cent of the total GDP at market prices, from the energy sector*. However, the First Nations do need to continue negotiating with the mainstream societies. As discussed so far, the external world has continued to provide them with political, social, legal, and economic opportunities to appeal their cultural values and attitudes towards their environment. It is interesting that having sought to gain a means of claiming their cultural values to the external world, the First Nations eventually decided to embark on environmental markets (i.e., application for forest certification; Section 6.4.6). There are good possibilities that the external economic force backed by a transcending environmental movement have a positive impact on local communities. With the global era, foreign direct investment (i.e., money), voices defending nature, and a sense of place have been permeating beyond the boundaries of cities and borders of nations, and spread all over the world. The cultural values of a certain community may transcend the boundaries of the community, and inversely multiple external values may affect the community's values and culture. Even the First Nations have decided to consider the effective use of the Internet (information transcending the boundary of the communities), such as the use of web sites to make their actions and intentions visible and tangible to the external world (e.g., the web-based caribou conservation certificates; Section 6.4.6). By diversifying strategies, the two First Nations are continuing to seek to gain a better position in the mainstream society and a better share of land, resources, and environmental services. For Aboriginal/ non-Aboriginal societies have long since interacted by shaping each other's societies better or worse, this interaction will continue into the far future, and what supports this interaction is through continual, desperate negotiation for a better share of land and resources.

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* The figure of the GDP is calculated based on Alberta. Economic Development (2005).

Comments

Finally, I would like to put brief comments on the First Nations and future research framework.

1) The Need of Community Meeting

I earnestly hope that the First Nations introduce the institution of community meetings in the near future, which I desired to observe, but never realised while I was writing this thesis. There seems to be a gap between the community members and the decision-making levels within the First Nations. The Little Red River Cree (LRRCN), like other First Nations in Canada, is governed by a Council consisting of a Chief and 11 councillors under the Indian Act. Each councillor is elected by community members, but they seem to have little communication opportunities with community members.

Under the Council, a subset of councillors (usually three councillors), and the chief as well, hold a Portfolio, in which they make a decision, as a collective will of the communities, for a specific programme that the First Nation has. Each Portfolio is established for a respective specific programme such as child welfare, social service, capital, and housing (see Figure 7.1). Among these Portfolios, there is the Environmental Economic Development, under which the First Nation has an operational body of economic development such as the LRR Forestry Ltd. In this way, the organization of the First Nation can be likened to a small version of the government that the province has.

For another, most of the First Nation's specific programmes are being run by non-Aboriginal persons. Although the Chief and councillors are elected from the communities, people who are in charge of specific programmes, such as the management of the forest company, are hired from what they call "non-Indians." It would be preferable for community members to take these job positions because they are well acquainted with communities' affairs and customs, but owing to the lack of skills and knowledge for areas

of specific programmes including industrial forestry operations, engineering, and law, Caucasians with expertise for respective areas are being hired. They are expected to translate the mainstream society's language and ways of thinking into the Aboriginal ones (Mr. Jim Webb, Corporate and Intergovernmental Affairs, Little Red River Cree and Tallcree First Nations, pers. comm. August 2004 in High Level). In other words, ventures of the First Nation's "government" are products of two cultures' interaction.

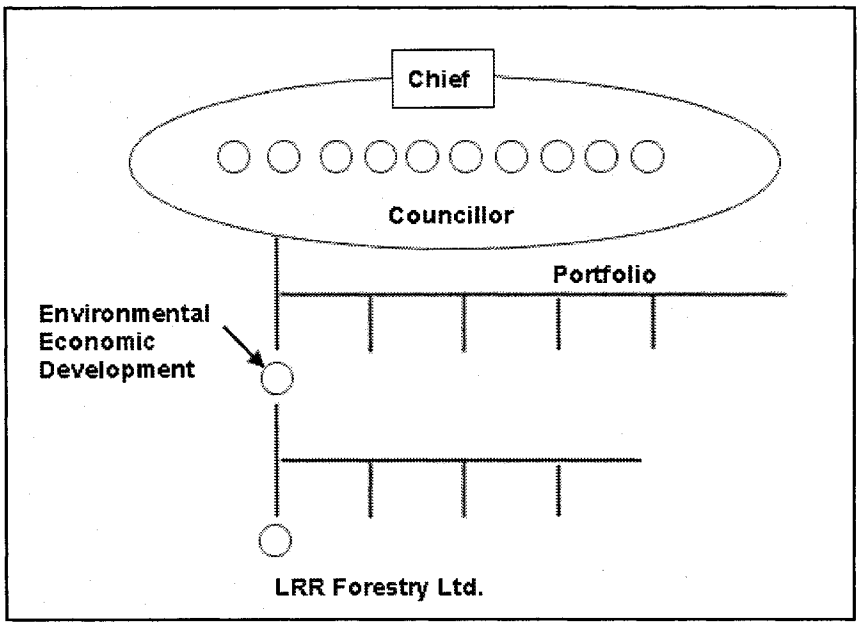

Figure 7.1. The governing system of the Little Red River Cree Nation

When I visited John d'Or Prairie (one of the LRRCN's Indian reserves) in the summer 2004, I was told from some persons that they did not know what the Council level was doing. Gradual changes happening within the communities come from the incorporation of a non-Aboriginal way of lifestyle into the Aboriginal way of lifestyle, which results from the Council's decisions. In order to get community members more familiar with the Council's decisions, I believe, they need to communicate more with each other and understand each other's concerns and considerations within the communities.

This will make councillors good representatives of the communities (Treseder 2000). Also, as Natcher and Hickey (2002) point out, the community members seriously need the inter- and intra- community information exchange through specific participatory mechanisms (Criterion 6 on page 145). It is regrettable that community members have not yet had such communication mechanisms within and with the outside of the communities, which will give them a good sense of participation into decision-making processes.

Because of a lack of this, I felt the community member's scepticism was directed towards researchers including me. Researchers had better give them back results of research through a means more tangible than just a form of documentation, such as an oral presentation within the communities (Treseder 2000). This is because usually people are not willing to read a thick document with a lot of academic terms.

2) The Making of a Forest Management Plan that Includes Traditional Ecological Knowledge (TEK)

Recent studies deal with the nature of TEK and emphasise the importance of the incorporation of TEK in resource management regimes from a theoretical point of view (e.g., Stevenson and Webb 2003). As Natcher and Hickey (2002) show, TEK can be used for the monitoring of forest health because fluctuations of wildlife populations can be considered as side effects of degradation of the ecological integrity (e.g., Natcher and Hickey's Criterion 1 on page 145). Hunters' knowledge based on first-hand, long-term observations can play an important role in the monitoring of forest health. Also, community members' values of secure access to wildlife habitat and populations can be utilized even for improvement of silvicultural methods (e.g., Criterion 2). Further, the incorporation of TEK will lead to the positive integration of the Aboriginal community's voices into a forest management regime (Criteria 1-4). In order to achieve a good balance

between habitat enhancement and industrial development, it is needed to link TEK with scientific ecological knowledge (SEK). If realized, this will be a good forest management model that will reflect both Aboriginal community members' (e.g., hunters) and foresters' perspectives.

3) Assertion of Aboriginal Culture and the Creation of a New Forest-based Culture

When it comes to Aboriginal forestry and Aboriginal/non-Aboriginal forest co-management issues, most studies have focused on the typology of forest (co-)management regimes (e.g., Notzke 1995; Treseder and Krogman 1999), legal issues associated with resource management (e.g., Natcher 2000; Ross and Smith 2002), methodology of traditional land use study (TLUS) (e.g., Robinson and Ross 1997), and so forth. However, there seem to be few studies discussing Aboriginal forestry in terms of the revitalization of Aboriginal culture or the creation of a new forest-based culture. This is partly because Aboriginal forestry is a relatively new phenomenon. As discussed in this thesis, the position of Aboriginal society was never static, irrelevant to other societies, nor fixed at a certain point of time. Recent anthropological studies on tourism and recreation have demonstrated that old cultural values within a community may be re-shaped to give comfort to those of the external world, which has possibilities that the community's cultural identity may be re-shaped. Aboriginal forestry has been conducted and developed in concert with economic development programmes that respective First Nations have, education and training programmes, wildlife management programmes. How far forest management, including these programmes and Aboriginal business, can assert Aboriginal culture or can create a new forest-based Aboriginal culture is still open to discussion – This may be part of my future research question.

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In accordance with the above guidebook, I use the following abbreviations in editing legal references cited.

App.	= Appendix
c.	= chapter
C.N.L.R.	= Canadian Native Law Reports
D.L.R.	= Dominion Law Reports
R.S.A.	= Revised Statutes of Alberta
R.S.C.	= Revised Statutes of Canada
s.	= section
S.A.	= Statutes of Alberta
S.C.R.	= Supreme Court Reports
W.W.R.	= Western Weekly Reports

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