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Co-Management of Natural Resources in Canada:

A Review of Concepts and Case Studies

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International Development Research Centre

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Working Paper 1

Co-Management of Natural Resources in Canada:
A Review of Concepts and Case Studies

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Abstract

In Canada, groups with diverse interests and values, including peoples of First Nations, have increasingly been coming into conflict over decisions on the use and allocation of environmental resources. Under the banners of co-management and joint stewardship, a variety of new institutional approaches to resource management have been gaining momentum in Canada, involving a restructuring of power and responsibilities among stakeholders. This restructuring involves moving away from a situation of top-down decisions and lack of coordination among Aboriginal and governmental resource management to decentralization and collaborative decision-making.

Co-management agreements between First Nations and Canadian governmental entities have developed in a variety of conditions and in response to a few distinct contributing factors. Moreover, the institutional arrangements and approaches to resource analysis and decision making put in place by different co-management agreements vary considerably. This paper examines co-management as a concept, and sets out to review and characterize a range of co-management experiences between government and First Nations in terms of: organizational structure, goals and mandated functions; stakeholder participation and representation; information use and analysis; and approach to decision making.

Resumen

En Canadá, grupos con diversos intereses y valores, incluyendo los pueblos de las Primeras Naciones, se han visto cada vez más enfrentados a conflictos debido a decisiones relativas al uso y asignación de recursos del medio ambiente. Bajo las banderas de la cogestión y de la administración conjunta, una variedad de enfoques institucionales con respecto a la gestión de recursos han venido ganando importancia en Canadá, requiriendo que entre las partes interesadas haya una reestructuración del poder y las responsabilidades. Esa reestructuración implica alejarse de enfoques en los que las decisiones se tomen unilateralmente en la cúpula y en los que no haya coordinación entre los pueblos autóctonos y la gestión de recursos gubernamentales, y dirigirse hacia la descentralización y la toma de decisiones de manera colaborativa.

Los acuerdos de cogestión entre las Primeras Naciones y las entidades gubernamentales canadienses han surgido bajo una variedad de condiciones y en respuesta a unos cuantos factores contribuyentes distintivos. Más aún, los acuerdos y enfoques institucionales con respecto al análisis de los recursos y la toma de decisiones puestos en práctica mediante los diferentes acuerdos de cogestión varían considerablemente. Este documento examina la cogestión como un concepto, y se propone analizar y caracterizar una gama de experiencias de cogestión entre el gobierno y las Primeras Naciones desde el punto de vista de la estructura organizacional, metas y funciones establecidas por el mandato; la participación y representación de las partes interesadas; uso y análisis de la información; y enfoque con respecto a la toma de decisión.

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I. Introduction

In Canada, groups with diverse interests and values have increasingly been coming into conflict over decisions on the use and allocation of environmental resources. Nowhere have these scenarios been more complex than where the values and interests of First Nations come to a head with those of other stakeholders, such as government resource managers, recreational hunters, conservationists and private resource developers. This is in large part due to cultural differences and unresolved historical conflicts between First Nations and the rest of Canadian society relating to the system of tenure and management on lands traditionally occupied by Aboriginal peoples.

It is precisely in the context of these incongruencies that some of the most innovative institutional responses have emerged in Canada to resolve conflict and improve participation in natural resource management. Under the banners of co-management and joint stewardship, a variety of new institutional approaches to resource management have been gaining momentum in Canada which involve “a restructuring of power and responsibility with regard to natural resources,” between Aboriginal peoples and other stakeholders (Notzke, 1995: 187). This restructuring involves moving away from a situation of top-down decisions and lack of coordination among Aboriginal and governmental resource management to decentralization and collaborative decision-making.

Co-management agreements between First Nations and Canadian governmental entities have developed in response to a distinct contributing factors and conditions. Accordingly, the institutional arrangements and approaches to resource analysis and decision making put in place by different co-management agreements vary considerably. Following an analysis of the concept of co-management and its contributing factors, this paper sets out to review and characterize the range of co-management experiences in terms of: organizational structure, goals and mandated functions; stakeholder participation and representation; information use and analysis; and approaches to decision making.

II. Co-Management: The Concept

In the field of resource management, the term co-management has been used to describe a new relationship between government agencies and local-level groups. Generally, this new relationship involves a change from a system of centralized authority and top-down decisions, to a system which integrates local and state level management in arrangements of shared authority, or at least shared decision-making. There are a variety of definitions and understandings of co-management in the literature, some of which are more limited than others in detailing what co-management actually involves.

The Royal Commission on Aboriginal Peoples considers that “co-management has been used loosely to describe a variety of institutional arrangements” for sharing of power and responsibility over resource management between government and local resource users including “consultation with members of the public on matters of land and resource allocation and management; the devolution of administrative if not legislative authority; and multi-party decision-making” (RCAP, 1997). In contrast to this broad interpretation, the definitions below illustrate how the term is sometimes used quite restrictively:

Co-management has come to mean institutional arrangements whereby governments and Aboriginal entities (and some times other parties) enter into formal agreements specifying their respective rights, powers and obligations with reference to the management and allocation of resources in a particular area of Crown lands and waters. (RCAP, 1997).

Not every situation where traditional resource users and government authorities work jointly on one or more aspects of wildlife and fisheries management can be described as co-management. In fact, an important element of co-management regimes is the formal nature of agreements between the two actors - outlining participation, structure, process and responsibilities (Winn, 1991).

Our definition of co-management is the blending of these two systems of management [local-level indigenous and state-level] in such a way that the

advantages of both are optimized, and the domination of one over the other is avoided" (Inuit Tapirisat of Canada quoted in RCAP).

Such strict interpretations would disqualify the majority of cases in the practice of co-management in Canada, as some do not contain formal agreements and very few are as effective in integrating local level and state level management, as the last definition of co-management would require. As conceived by these strict interpretations, co-management is an ideal management system which does not actually exist in practice but is aspired to and incrementally approached. Given the variations in co-management practice, a more useful conception of a continuum of co-management arrangements is described by Berkes (1991a), who argues that there are various levels of co-management corresponding to the extent of local-level involvement and shared decision-making in resource management, as well as the degree of integration of local and state level management systems.¹ Similarly, Hawkes (1996: 87) distinguishes between "pure" co-management, which "involves the real sharing of decision-making power," and "weak" co-management which "may include some minimal level of public participation in government management of a resource.

Pinkerton (1996) also adopts a broad characterization of co-management that includes various levels: The term co-management has been used in a broad sense to designate a wide array of arrangements for shared decision-making authority between government resource management agencies and community-based parties. These arrangements differ a great deal in the degree of power and initiative that is shared and in the scope and complexity of agreements. At the highest degree of power-sharing, a tribe or nation with treaty rights to fish might theoretically share jurisdiction with a government agency , and in practice at least share management authority (Pinkerton, 1996, p. 56).

¹ The lowest levels may only involve one-way information provision or token consultation; at intermediate levels information exchange and advisory boards bring user concerns to bear on management decisions; and at the upper stages local resource interests are involved in management boards which make binding decisions. At the highest level shared decision making is institutionalized as and there is a partnership among equals (Berkes, 1991b).

Such broad interpretations which set forth ideals for co-management practice but recognize different levels of co-management and are inclusive and flexible, seem most appropriate given the varied, incremental, and evolving nature of co-management arrangements.

III. Examples of Co-management in Canada: Contributing Factors

Since the signing of the James Bay and Northern Quebec Agreement in 1975 marked the introduction of the first Canadian co-management agreement (Berkes, 1989), more than 15 cases involving similar approaches have emerged in various parts of the country (Notzke, 1995). A fundamental contributing factor to the development of co-management arrangements in Canada is the history of political and legal struggles for Aboriginal title and land claims. Aboriginal title gives First Nations distinctive rights to lands and resources by virtue of traditional occupancy and use (Usher, 1986). While these rights have been recognized in legal documents since British colonial times, a very narrow interpretation of Aboriginal title has dominated which means that First Nations have an allocation right to existing traditional resources for subsistence, but there is no onus on other resource users not to infringe upon those rights since they are not an enforceable claim to be protected by the government or upheld in the courts (Usher, 1986). First Nations have struggled for a broader interpretation of Aboriginal rights which would give them a legally-enforceable proprietary interest in resources (Usher, 1986). The Constitution Act of 1982 and Court decisions -- including the Supreme Court Ruling on Nisga'a (1973) and rulings of the B.C. Court of Appeal (1986) and Supreme Court (1990) on Sparrow -- have been described as watersheds in terms of setting the legal basis for broader interpretations of Aboriginal rights (Berkes, 1989 and Notzke, 1995). These legal changes, combined with the rising tendency of Aboriginal groups to defend their land rights, led to a context of contested Aboriginal/Crown authority over resources. Aboriginal groups could legally challenge the ability of the Crown to legislate conservation measures and allocate resources among competing uses, and have a good case. While

there was still considerable uncertainty surrounding the extent of traditional lands and the nature of Aboriginal rights, the potential for Aboriginal groups to obstruct resource developments and regulations through court challenges presented severe complications to government and industry operating under the conventional mode of resource management.

Sparrow indicates that aboriginal fishing rights consist not just of a claim to a share of the harvest, but also of a stake in the conservation and management of the resource. The positive approach for governments would be to give recognition and force to aboriginal systems of tenure, management, harvesting, and utilization, by entering into co-management or self-government arrangements. The alternative is to engage in long and costly skirmishes in court, which aboriginal people would appear to have a good chance of winning (Usher, 1991b: 21).²

Thus a new approach to resource management in Canada was imperative, especially in the North where resource development was most directly infringing upon traditional uses.

The Inuit/Cree court challenge of the James Bay hydro development was an indication that the assertion of Aboriginal rights would be an impediment to northern resource exploitation. According to Berkes (1989), it was this court challenge combined with the bolstered strength of Aboriginal rights which shaped a new federal policy of pursuing comprehensive land claims agreements.

Through land claims, Aboriginal title would be extinguished and exchanged for cash compensation and more clearly defined rights in settlements involving: jurisdictions of exclusive Aboriginal and Crown authority and a jurisdiction of shared authority or co-management. Negotiating land claims represents a strategy to avoid resource conflicts and move towards a non-confrontational means for the expression of Aboriginal resource

² While *Sparrow* was a ruling on fishing rights in B.C. Notzke (1995) describes that its implications extend to rights for other resources in other jurisdictions of Canada.

interests by exchanging Aboriginal title for clarified jurisdictions and an institutionalized means to jointly undertake resource management.³

The first two “claims-based” co-management regimes were produced by the James Bay and Northern Quebec Agreement (1975) and the Inuvialuit Final Agreement (1984). In each of these cases the major impetus behind claims settlements was a drive for northern resource development, and related government desire for legal certainty so as to avoid court challenges (Berkes, 1989 and Doubleday, 1989).

The impetus for [claims] settlement in areas of the Arctic never before under treaty comes from a governmental concern for legal certainty [surrounding Aboriginal rights] as a precursor for northern development, and from political commitments with respect to social justice for Native citizens. Undoubtedly, the drive for northern development, particularly oil and gas, in the rich Beaufort Sea has been a prime factor. (Doubleday, 1989: 210).

The Nunavut Land Claims Agreement (1993), by contrast, was mainly prompted by a drive for political autonomy. Other recent land claims negotiations with the federal government involve the Gwich'in and Dene Sahtu Nations. In 1990, the government of British Columbia initiated a policy of negotiating land claims agreements in that province, and established an independent B.C. Treaty Commission to oversee and facilitate negotiations. The implications will be far reaching. More than 40 First Nations have filed an intent to negotiate to the Commission, and several are currently undertaking negotiations. In B.C. as in the federal process, land claims settlements are an avenue towards preventing specific resource conflicts by transforming a situation of contested authority over resources to one where Aboriginal and government rights and responsibilities are clarified in co-management arrangements.

³ While some First Nations see advantages in the more tangible rights and roles in resource management they can obtain through the co-management provisions of comprehensive land claims, others are opposed to the clause requiring the extinguishment of Aboriginal title.

The lengthy process of land claims negotiations is often threatened by specific resource conflicts caused by resource use decisions on unresolved claims. Co-management measures have sometimes been reached as an outcome of such resource conflicts or advanced preemptively in order to safeguard the land claims process. Logging on the unresolved claim of the Teme-Augama Anishinabai (TAA) in Ontario led the TAA to undertake legal and political action. Out of the crisis, "the Peterson government placed the most heavily contested area under the supervision of a joint stewardship council [the Wendaban Stewardship Authority] and agreed to a framework for negotiations with the Temagami Indians." (Benedickson, 1996). "Like the Wendaban authority on which it was modeled, the Clayoquot Sound agreement establishes a joint land and resource management process" as an interim measure to safeguard land claims negotiations (RCAP, 1997).

On the Islands of Haida Gwaii (Queen Charlotte Islands), logging pressures during claim negotiations led Haida to unilaterally designate their own protected area, which the government eventually supported, giving a shared management structure but vague legal status to Gwaii Haanas/South Moresby National Park (RCAP, 1996: Section 7.3). In B.C., land claims negotiations have been accompanied by a joint stewardship policy, which provides "a mechanism through which we can... in the period leading up to negotiations or parallel with treaty negotiations form a new...

cooperative relationship in terms of the stewardship of resources" (Petter 1992 quoted in Notzke, 1995: 201). The joint stewardship policy is "highly flexible" and "has resulted in agreements with very different focuses, contents and consequences," depending on the issues and interests involved (Notzke, 1995).

There are a several varied experiences in which co-management has emerged outside of the context of Aboriginal rights and land claims negotiations. The Barrier Lake Trilateral Agreement involving Algonquins, Quebec, and the federal government is a case where co-management emerged from a resource conflict (Notzke, 1993).

In the late 1980s, when the province began to lock surrounding lands into 25-year timber supply and forest management agreements with logging companies, the Algonquin decided to challenge the province by seeking a court injunction as an immediate step to alleviate continuing pressure on their traditional land base and to force the federal and provincial governments into negotiations (RCAP, 1997).

The 1991 agreement which came out of these negotiations is not based on Aboriginal title or rights to land and resources but, strategically, on the concept of sustainable development in view of integrated resource management which would consider Algonquin use (RCAP, 1997). Although it is not based on Aboriginal rights nor tied to the treaty process, the "Algonquins of Barriere Lake see it very much as an interim measure that will help protect their rights to lands and resources in advance of their eventual comprehensive claim" (RCAP, 1997).

Co-management measures have also been initiated by government in the search to find an appropriate policy response to a perceived or real resource depletion crisis (Notzke, 1995).

Following a perceived crisis in Caribou populations, the Beverly-Qaminirjuaq Caribou Management Board was jointly created in 1982 by the governments of Saskatchewan, Manitoba, the Northwest Territories and Canada in order to bring harvesters into decision-making and coordinate information sharing and management among resource users and relevant government agencies (Usher, 1993).

To deal with a drastic decline in moose populations in Manitoba, a co-management agreement was struck in 1984 between the provincial government and the Waterhen First Nation in order to manage Treaty Indian hunting. Following recovery of the population, the First Nation has obtained licences from the province to issue to non-resident hunters. However, in 1990 Manitoba allocated most of the moose habitat to a pulp and paper company. The First Nation has sought a bi-lateral negotiation process which would set out terms to resolve the conflict in a co-management agreement which affirms Aboriginal and Treaty rights, however the process has been stalled due to a

disagreement over whether final decisions should be made jointly or whether the minister should retain final authority.

In the Baffin Island communities of Clyde River and Broughton Island, wildlife managers responded to scientific data indicating polar bear overharvest by seeking a quota reduction “by means of a negotiated agreement between the community Hunters and Trappers Associations and the Government of the Northwest Territories” (Notzke, 1995: 197). The agreement was reached and implemented through a simple Letter of Understanding in 1985, as opposed to a formal agreement.

This proved to be an effective means to bring about the required harvest reduction since, for one thing, harvesters and government managers were able to agree that there was an overharvesting problem and that they would work together to find a solution (Notzke, 1995). In 1992 the agreement was renewed and another informal polar bear agreement was worked out with Arctic communities, thus showing how successful experience can also contribute to the spread of co-management.

Co-management arrangements involving aboriginal and non-aboriginal interests are being established throughout Canada under widely varied circumstances and for diverse purposes.

Overall, the origins of co-management in Canada have been in crisis and struggle related to conditions involving resource conflict and/or resource depletion where aboriginal and non-aboriginal interests are concerned. New types of co-management will likely continue to develop in response to the conditions and opportunities which evolve.

IV. Co-management Agreements: Organization, Goals and Mandated Functions

Whether they are set up to deal with a resource depletion crisis, as a result of land claims settlements, or as interim measures, co-management agreements usually result in the establishment of one or more boards, containing members which are selected by the Aboriginal and government signatories. These boards implement the terms of co-management agreements. While many comanagement arrangements involve a single committee or board, the Inuvialuit Final Agreement created five co-management institutions: Wildlife Management Advisory Councils for NWT and the Yukon; the Fisheries Joint Management Committee, the Environmental Impact Screening Committee, and the Environmental Impact Review Board. The Nunavut Final Agreement also established a range of co-management institutions. The goals and mandated functions of co-management boards are discussed below.

From a review of the literature on various co-management arrangements, Winn (1991) found that the primary goals of co-management involve more appropriate, efficient and equitable resource management, as well as the "integration of the state-based and indigenous self-regulatory systems." Secondary goals include community based development, decentralizing decisions, and reducing conflict through participatory decision-making (Winn, 1991). Other goals identified at a Circumpolar workshop on co-management include improved data collection and analysis, education and information sharing, consensus decision-making, and cooperation between government managers and local harvesters (AINA, 1996). In the case of co-management under the Inuvialuit Final Agreement (IFA), the goals are to preserve Inuvialuit cultural identity, to enable them to become equal participants in economic and social development, and to preserve the Arctic environment.

Functions mandated under co-management agreements cover a broad range. Some functions include: designing, administering, and monitoring research programs;

establishing quotas, regulating commercial activities and making allocation decisions (often through recommendations); enforcing regulations; legislation/policy analysis and recommendations; developing and implementing conservation plans; assessing resource development proposals; cooperating with other co-management bodies; consulting with community and harvester organizations and responding to their requests for information, research, and action (Winn, 1991). These functions vary considerably according to the nature of the co-management arrangement at hand.

Co-management arrangements initiated by government to mitigate resource depletion crises often have specialized mandates involving research and recommendations on the management of a specific resource. The mandate of the Beverly Qaminirjuag Caribou Management Board is to conduct and support research on the caribou herd and its habitat; establish a joint process for developing caribou management programs involving government and users; advise both parties on caribou management in four jurisdictions (Manitoba, Saskatchewan, NWT Keewatin and MacKenzie Districts); and to educate and communicate on conservation issues (Usher, 1993 and Notzke, 1995). Advice to government agencies concerns both the level and allocation of caribou quotas (Notzke, 1995).

By contrast, those co-management arrangements which emerged out of land claims settlements often deal with the comprehensive management of all resources on specific lands. The James Bay and Northern Quebec Agreement (JBNQA) sets terms for co-management which go beyond fisheries and wildlife management to address broader issues of resource control and socioeconomic development. The JBNQA includes provisions for collaborative research, allocating resources among native and other users, respect for indigenous resource management systems, local government powers, socioeconomic development programs, income security, mandatory impact assessment for developments, royalties, cash compensation, and the establishment of a joint (aboriginal-government) coordinating committee as the main co-management institution (Berkes, 1989). Moreover, in the context of rising resource conflicts largely due to hydro development, this "coordinating committee has been successfully used as a forum to

discuss conflicts, to communicate with government, resource managers, and indirectly with other users." (Berkes, 1989). For many resource management decisions, the role of the Coordinating Committee is strictly advisory: "recommendations are forwarded to the minister, who may accept, reject, or alter them so long as the reasons are stated before decisions (RCAP, 1997). However, the co-management regime does have "authority to establish limits for certain species in certain zones" (RCAP, 1997). In some areas, land allocation and resource licencing for occurs at the local level through harvester organizations on the basis of customary management practices (Berkes, 1991).

In the cases of Nunavut and the Yukon Umbrella Final Agreement, "the management boards may approve... management plans, the establishment of conservation areas and management zones, and the designation of rare, threatened, and endangered species" (RCAP, 1997). In the Western Arctic, the Inuvialuit Final Agreement (IFA) specifies the details of preferential and exclusive fish and wildlife rights, subject to existing laws. IFA co-management arrangements provide institutional arrangements to deal with various components of resource management including allocation, regulation, enforcement, research, impact assessment, and policy and legislative review. (Doubleday, 1989). In this case as well as under the Nunavut Final Agreement, co-management has the scope of a comprehensive institutional structure advising on decisions which regulate regional resource use.

Co-management regimes apply to both public and Inuit lands and operate quite apart from whatever protection Inuit as land owners wish to provide on their own lands. The co-management regimes are therefore instruments of regional or territorial government that apply to all persons , all tenure and permit holders, and all developers within the territory. The intent is that everything concerning fisheries, wildlife, land use and the environment be reviewed and consented to by the co-management bodies and... by Inuit. (RCAP, 1997).

However, since IFA decisions are advisory, "final decisions are invariably made by government ministers (Notzke, 1995: 193).

Co-management arrangements which arose to resolve resource conflicts but were not the result of land claims settlements "generally adopt a holistic and ecosystem approach to land and resource management" (RCAP, 1997). For example, the Barriere Lake Trilateral Agreement "established a four-year process involving: interim protection measures, resource analysis, education, preparation of an integrated management plan, and recommendations for the implementation of the plan. (Barrier Lake, RCAP). In Temagami, the Wendaban Stewardship Authority (WSA) sought to operationalize sustainable development through a 20-year stewardship plan and a zoning approach to reduce land-use conflicts "in the four townships most closely associated with the intense and persistent old growth pine forest controversy" (Benedickson, 1996: 44 and RCAP, 1996). The WSA was involved in research and professional advice. In addition, the mandate specified that Ontario and TAA intend "to assign responsibility" to the WSA to "plan, decide, implement, enforce, regulate, and monitor all uses of and activities on the land within its area of jurisdiction" (47). Indeed, "WSA's mandate clearly conferred decision-making responsibility, making this innovative institution something quite different from an advisory body." (Benedickson, 1986). While both these approaches and claimsbased co-management deal with the comprehensive management of resources on specific lands, the organization structure and mandates of the former tend to be less compartmentalize and they also deal with co-jurisdiction to a greater extent (RCAP, 1997).

V. Stakeholders, Participation, and Representation

The general pattern of stakeholder participation in co-management regimes has been to have Aboriginal and government signatories to the agreement each select an equal number of members to committees, despite the overall number of Aboriginal and government signatories. Selection procedures (appointment and representation) and issues of constituency accountability are not adequately described or analyzed in the literature.

According to the terms of the JBNQA, seats on the Coordinating Committee are divided equally between Aboriginal groups and the Quebec government, and the chair is rotated annually. At the outset, Cree board membership was selected through the Cree Regional Authority and Inuit through the Quebec Inuit Association; however since 1978 Inuit appointments have been through Makivik Corporation (RCAP, 1996).

Following the Inuvialuit Final Agreement, five co-management institutions were created, each of which divides membership equally among Aboriginal and non-aboriginal groups; chairs are government-appointed but require Inuvialuit consent. Aboriginal appointments are made through the Inuvialuit Game Council (IGC), a body containing representatives from the Hunters and Trappers Committees (HTCs) of six Inuvialuit communities. Government appointees are made through Yukon and NWT territorial governments as well as the federal Department of Environment and Department of Fisheries and Oceans (Notzke, 1995: 192).

The Beverly-Qaminirjuaq Caribou Management Board contains 13 members: 8 represent Aboriginal groups and 5 are government representatives. The governmental representatives include one from each of Saskatchewan, Manitoba, Keewatin District, MacKenzie District, and the federal government. Aboriginal representatives include two community representatives from each of the provinces. Aboriginal representatives from the NWT include two from the Keewatin Wildlife Federation, and one from each of the Dene Nation and Metis Association (Notzke 1995 and Usher, 1993).

In Temagami, the 12 appointments to the Wendaben Stewardship Authority were split evenly between the TAA and the Ontario government. However, instead of placing public servants on the board, the Ontario government selected stakeholders from a broad range of sectors. In fact, members were selected by both parties in an attempt to incorporate the diversity of local interests (RCAP, 1997).

Co-management boards promise to enhance community participation in management by acting as a liaison between local hunting and trapping organizations and territorial and federal resource management agencies (Winn, 1991). However, at times representation has been problematic. Such was the case with the Nunavut Wildlife Management Advisory Board in managing the beluga whale stock. Restricted by funding shortages, the board agreed to an annual quota of five whales per community without undertaking appropriate consultation (Notzke, 1995: 198 and Pike et al, 1991).

A crisis soon escalated as harvesters defied the quota, government officials seized a beluga, people marched in the streets protesting the quota, and a radical group attempted to disrupt a board meeting (Notzke, 1995: 198 and Pike et al, 1991).

Broader stakeholder inclusion in co-management arrangements is perhaps particular to the Temagami case. The Royal Commission attributes the generally limited involvement of other stakeholders in co-management to the isolation of co-managed lands, and relatively limited number of stakeholders with interests in those lands (RCAP, 1997). However, in regions where many stakeholders are present, Aboriginal groups have resisted the involvement of third parties, such as business, until co-management arrangements are firmly established. This is because many First Nations involved in co-management do not see themselves as equal among stakeholders in resource use, but rather as a partner with authority to collaborate with government in the management and regulation of regional resource uses in areas of their traditional lands. The case of the 1993 Canada-Gwaii Haanas Agreement, by which the parties overcame a sovereignty

disagreement and agreed to cooperatively manage the South Moresby Archipelago, is illustrative of this tension between joint authority and broader stakeholder inclusion:

From the perspective of sovereignty, there are two clearly defined stakeholders: the Council of the Haida Nation and the Government of Canada. The agreement, through the Archipelago Management Board (AMB), provides for meaningful and equitable participation of both parties... From the perspective of users, however, other potential stakeholders in the management of Gwaii Haanas, such as the Islands' non-native residents and commercial tour operators, are not directly included in the decision-making process. Instead, they are indirectly represented through the federal members of the AMB. The fairness and effectiveness of AMB decision-making with respect to all key stakeholders in Gwaii Haanas will depend largely on the degree to which the federal government is able to fairly and effectively represent these "third party" interests (Hawkes, 1996: 95).

However the general experience with co-management is that "the notion that government representatives (public servants) also represent major non-Aboriginal stakeholders is not well accepted" (RCAP, 1997).

In the James Bay case, limited stakeholder involvement has limited the scope for managing resource conflicts through co-management. The JBNQA provides safeguards to preferential and exclusive aboriginal harvesting rights through the control of commercial and recreational fishing by the Coordinating Committee (Berkes, 1989). However, since the agreement has no provisions for involving non-native harvesters, conflicts over resource use between natives and non-natives cannot be resolved through the Coordinating Committee (Berkes, 1989). Similarly not included in the Committee are indigenous groups living within the region covered by the JBNQA who, unlike the Cree, Inuit and Naskapi, have yet to reach land claims agreements with the government. This has led to strained relations between the Naskapi and Montagnais and between the Cree and neighbours to the south and southeast (Berkes, 1989).

Some stakeholders excluded from the co-management process have access to other means of influencing decisions. For instance, resource developers, recreational hunters, and conservationists often form strong political lobby groups. In the Western Arctic, conservation interests weighed heavily into the terms of the Inuvialuit Final Agreement, and exercise a significant control on subsistence harvesting of bowhead whales by Inuvialuit. Section 14 of the IFA only gives the Inuvialuit access to animals where a harvestable quota exists, and quotas are subject to conservation principles. Doubleday (1989:224) explains that, "as long as the western Arctic bowhead stock continues to be designated 'endangered' by international interests, the provisions of section 14 of the IFA are largely irrelevant." Moreover, the research which would be required to challenge the presumed endangered status of bowhead whales and establish a scientifically supported management quota has not been undertaken due to lack of commercial interest in the resource (Doubleday, 1989).

VI. Information and Analysis

Developing, agreeing upon, and analyzing a common base of information is a fundamental step in jointly undertaking resource management decisions. Yet due to the diversity of culture and experience among parties involved in co-management arrangements, some of their most difficult challenges relate to integrating (or at least coordinating) information sources and knowledge systems.

Hawkes (1996: 89) argues that "co-management is most likely to be successful where the responsibilities for data collection and analysis are willingly shared by local users and the state," in order that both traditional and scientific knowledge can be used, and that users can develop confidence in the information on which decisions are based. One manner in which this challenge is being addressed through the Gwaii Haanas agreement is by establishing that the Archipelago Management Board as an information clearing house, through which all relevant information must be referred. However, it is too early to assess the effectiveness of this mechanism in meeting the challenges raised above.

In the James Bay case, while co-management parties agreed to jointly undertake research, most of the management-oriented research for the first six years since the agreement has been done and financed by native organizations, since the Quebec government has been less than diligent in fulfilling its research obligations (Berkes, 1989 and Winn, 1991). “The provincial government itself has invested almost no money in research or exploration of the fisheries resources in the northern parts of the province (Power 1989 as cited in Berkes, 1989: 201). As a result, “the Coordinating Committee does not have a large body of information to draw on when making decisions or recommendations” (ibid). In this context, the response of the Inuit party to the JBNQA to “heavy research demands” was “to create a research department within Makivik Corporation” (RCAP, 1996). Research was undertaken by federal and provincial agencies as required for impact assessment of the Great Whale hydro developments, in which some Cree participated. However, the Cree did not relate well to the scientific methods which were used. For example, with fish population dynamics research the Cree did not feel they learned anything they did not already know and further objected to the study technique of tagging fish (Berkes, 1989: 195). These indications from the James Bay experience suggest that the challenge of integrating information and knowledge systems is not being met.

Through analysis of the experience co-managing the Beverly Qaminirjuag caribou herd, Usher (1993) further explores issues of information use where both indigenous and scientific knowledge are involved. He finds that while the Board makes a sincere effort at bridging cultural gaps and using traditional ecological knowledge, several barriers are complicating their efforts. First, as “English is the working language Board,” and there is no systematic translation, “hunters with the most profound ecological knowledge tend ... to be effectively screened from Board membership” (Usher, 1993: 116). Further, there is a lack of conceptual common ground both among native user groups and between them and government scientists.⁴ Usher (1993) observes that while traditional knowledge is discussed, it is often left at an anecdotal level and little attempt has been made to use a

⁴ With reference to joint research experiences in northern Ontario, Chapeskie (1995) explores this lack of conceptual common ground in detail.

mode of analysis which can effectively integrate both indigenous and scientific knowledge into a system of understanding. The scientific models which are used by default are hardly able to recognize traditional knowledge (Usher, 1993: 117).

...user input affects research priorities, and the selection of research problems, but not research design.... Meetings have not been the occasion for drawing out and systematizing observations from around the range, even though users themselves share these observations informally (Usher, 1993: 117).

Usher (1993: 117) argues that "the criteria for co-management ought not simply to be user participation in the state system, or even the appropriation of user knowledge by the state system, but rather a harmonization of the state and indigenous approaches to understanding." In this respect the Caribou Management Board has fallen short, since "the knowledge of Aboriginal hunters has still not been adequately utilized, nor the views adequately understood and incorporated into the management process" (Usher 1993: 117).

Indications from the literature are that difficulties in integrating Aboriginal and governmental modes of analysis and resource management are common in the practice of co-management. Through a review of co-management regimes, Winn (1991) considers that this integration is generally not great although traditional knowledge is incorporated to some degree and some approaches have strengthened self-management practices.

VII. Approach to Decision-Making

The effective operation of co-management structures requires decision-making involving a greater number of stakeholders in a more collaborative and coordinated mode. The drafting of a grizzly harvest quota in response to local concerns in the framework of the Inuvialuit Final Agreement (IFA) illustrates the institutionalization of a new collaborative mode of decision-making involving local Hunters and Trappers Committees (HTCs), the Inuvialuit Game Council (IGC), the government, and co-management bodies such as the Wildlife Management Advisory Committees (WMAC).

With the WMAC (NWT) acting as a facilitator, consultations occurred between the government and the Inuvialuit until a consensus was reached. The WMAC (NWT) then made its recommendations to the Minister of Renewable resources, who accepted them. It therefore became the responsibility of the IGC to designate the hunting area and quota recommended by the Minister. Once this was accomplished, the Tuktoyaktuk HTC drafted and passed a bylaw with the assistance of the Territorial Justice Department that set out the terms under which grizzly bear could be taken. ...The IGC approved the bylaw, making it applicable to all Inuvialuit. Concurrently, the government of the NWT adopted the bylaw as a regulation under the Wildlife Act, making it enforceable by Wildlife Officers...

At the same time the government passed a regulation under the Wildlife Act which was virtually identical to the HTC by law, making its terms enforceable as a general law to non-Inuvialuit (Carpenter et al., 1991 as cited in Notzke, 1995:193).

Thus, government agencies are no longer the sole authority involved in making and implementing harvest quota decisions. Co-management under the IFA sets forth a decision-making process which "requires cooperation between government, the joint bodies, the IGC and the HTCs to determine and establish harvest quotas (ibid).

Several co-management arrangements have either specified a consensus mode of operation in their protocol or appear to be making decisions by consensus. Often, use of consensus is presented as an adaptation of an Aboriginal mode of operation and contrasted with the conventional confrontational style of decision making typical to southern Canadian organizational protocol. For example, in reference to the Temagami experience, the Royal Commission on Aboriginal Peoples reports that the Wendaban Stewardship Authority "built some aspects of traditional Aboriginal protocol into their procedures, such as reaching decisions on the basis of consensus" (RCAP, 1996). The Beverly Caribou Management Agreement, "calls for consensus decision-making whenever possible, acknowledging the value of the indigenous system (Notzke, 1995: 195). In the James Bay case, there has been concern that the Coordinating Committee is "a white man's institution run by white mans rules" and this limits the extent of native participation (Berkes, 1989). In the late 1970s when the rotating chair was with the Cree, decisions operated by consensus, which "produced generally better results than the confrontational mode of operation which was subsequently used under non-Native chairmen," since decisions forced to a vote were sometimes ignored by the minister (Berkes, 1989)

While co-management arrangements offer potential to improve the participation of indigenous peoples in resource management, they run the risk of having little impact on the tradition of top-down state management since many of their decisions are merely passed on to government ministers as recommendations. To what extent are board recommendations being acted upon? Moreover, what can done to ensure these recommendations actually have an impact?

While ministers have the power to reject the recommendations of co-management boards, the Royal Commission claims that "in practice... decisions are seldom overridden if boards establish their competency, credibility, and effectiveness" (RCAP, 1996).

A recent recommendation of the Environmental Impact Review Board (an IFA-established co-management body) on the Kulluk Drilling Program proposed by Gulf

Canada illustrates that advisory boards do "have teeth" (Notzke, 1995: 194). The EIRB recommended strongly against the drilling program on the basis of "lack of preparedness on the part of Gulf and the federal government to deal effectively with a major oil well blowout in the Beaufort Sea" and uncertainty as to Gulf's potential liability in such a worst case scenario (ibid). While the recommendation resulted in "some serious disagreements" between the EIRB and the governmental regulatory authority, the development did not take place (ibid). "Though legally the EIRB... has only an advisory function, for reasons of public image the government is unlikely to approve developments or adopt measures in opposition to the Board (Gary Wagner, EIRB Secretary, as cited in Notzke, 1995: 194).

However, it would be precarious to rely merely on public image. Not all recommendations have not been acted upon by the responsible minister. In the case of the Beverly-Qaminirjuag Caribou Management Board, authorities have been diligent about following species-specific recommendations (such as harvesting levels) but have failed to respond to recommendations pertaining to habitat protection for the Caribou herds, which imply forgoing other activities such as industrial development on the vast Caribou range (RCAP, 1996 and Osherenko, 1988: 95). In the James Bay case, the Coordinating Committee reports to a ministry which serves the recreation lobby and thus recommendations are often ignored for political reasons. (Berkes, 1989).

To avoid such problems, some recent co-management arrangements are employing mechanisms to encourage the implementation of recommendations. An innovative procedure is used by the Yukon Fish and Wildlife Management Board which ensures board recommendations are not ignored.

When the Board recommends draft regulations to the government, the government is required to respond to these recommendations within a set time period. Under the disallowance procedure, if the government does not respond to or act on recommendations within the set time period, then the government is obligated to implement the recommendations. This procedure ensures that government will respond to the recommendations rather than ignoring them." (Roberts, 1996: 46).

Similarly, the Nunavut Wildlife Management Board "is empowered to make management decisions subject to disallowance by appropriate ministers" (Notzke, 1995: 197).

Although the mode of decision-making by co-management institutions has been mainly advisory, there have already been some recent efforts at co-management involving equally shared authority which it is instructive to review considering the incremental tendency in this direction. The Wendaban Stewardship Authority was "set up as a decision making body that would report to Ontario and the Teme-Augama Anishinabai, rather than as an advisory body to a government minister" (RCAP, 1997). However, authority was only granted to the WSA by the Teme-Augama; it "did not obtain the promised legislative jurisdiction over the four townships from Ontario." This led to "problems of operating without a clear legislative base," as the WSA's decisions were challenged by district staff of the Ministry of Natural Resources (RCAP, 1997).

By way of the Gwaii Haanas Agreement, the Haida Nation and the Canadian government have agreed to collaborate on management of the Archipelago as a protected area despite an underlying sovereignty conflict, which means that "each party is of the view that it maintains ultimate jurisdiction in the Archipelago" (Hawkes, 1996: 93). Consensus decisions are deemed recommendations to both the Canadian government and the Council of the Haida Nation; the two governments are also deferred matters on which consensus cannot be reached within the Archipelago Management Board and may request an agreed mediator (1993 Gwaii Haanas Agreement Provisions, as cited in Hawkes, 1996: 98). Enforcement has been problematic since neither party would recognize the legislative authority of the other to do so. One complication was the inability to regulate back country use by way of permits.

To resolve this question, a compromise was struck: instead of permits, the two sides agreed to issue back country registration forms. One side of the form bears the CPS [Canadian Parks Service] logo; the other bears the logo of the Council of the Haida Nation (Hawkes, 1996: 93).

However, a difficulty with this innovative system is that it still does not carry the force of law (ibid). Indeed, there are many challenges to shared authority arrangements which remain to be worked out.

VIII. Summary and Conclusions

Resource management in Canada has been characterized by circumstances of asymmetrical duality, since indigenous and state systems have existed side by side but have been uncoordinated or in conflict. While resources and effective authority have been overwhelmingly concentrated in the state-based system, this has been increasingly challenged by indigenous groups advocating their rights to resources and to participation in decisions affecting the use of those resources. The challenge of co-management is to move from these circumstances to an approach to resource management that integrates indigenous and governmental approaches in a balanced manner.

In the context of a redefinition of Aboriginal rights and rising conflict over resources, comanagement emerged as an innovative institutional mechanism to manage areas of shared jurisdiction at the outcome of land claims negotiations. Prime factors motivating the Federal Government Policy to negotiate land claims with First Nations was the need to obtain legal clarity to enable resource development in a context in which Aboriginal peoples were increasingly advocating their resource rights, which, in turn were receiving a more influential legal interpretation.

Co-management arrangements have also been initiated by government for practical reasons when conventional state-based management led to resource depletion crises or had become legally problematic in light of new interpretations of Aboriginal rights. Later, co-management came to be used as a way to resolve resource conflicts during and in preparation for land claims negotiations.

Just as co-management arrangements have arisen in response to a variety of contributing factors, their organization, goals, functions and approach to stakeholder involvement, analysis and decision making also cover a broad range.

Generally, co-management arrangements implemented by governments to deal with a resource depletion crisis have a simple organizational structure involving a single committee and are oriented to the management of the single species in jeopardy. The inability to make recommendations on broader land-use decisions has sometimes limited the effectiveness of these co-management arrangements, since recommendations on habitat protection are beyond their mandates. While the first claims-based co-management arrangement also had only one committee, subsequent claims based co-management set forth complex organizational structures involving several committees. As a whole these “claims-based” co-management arrangements undertake a more comprehensive resource management role, and the various committees divide responsibilities for such functions as research, resource allocation, conservation, and impact assessment. Co-management arrangements which were designed to resolve a resource conflict or as interim measures in land claims also deal with comprehensive resource management, but have simpler organizational structures.

Co-management is often described as requiring the integration of indigenous and scientific approaches to resource analysis and management. While some progress has been made in the recognition and use of traditional knowledge and traditional management approaches, examples from the practice of co-management do not indicate that the integration of approaches to analysis is being effectively accomplished. Indeed, the cultural barriers involved make this one of the most difficult challenges facing co-management.

Co-management has involved a move from centralized to collaborative decision-making. Consensus-based approaches to decision making are being used in a number of contexts. Further research is needed into the specific definitions and mechanisms of

consensus decision-making, as well as the extent to which Aboriginal approaches are being used.

Co-management arrangements have decentralized resource management and institutionalized a role for indigenous peoples through the establishment of joint government-indigenous management boards and advisory committees. The extent to which such Aboriginal participation works as an effective mechanism to balance and represent various Aboriginal interests is a question which can only be answered through further research. Some analyses of co-management experiences suggest that representation of Aboriginal harvesters in co-management boards has been problematic at times.

A further issue is the manner in which third party interests in Aboriginal-State co-management are dealt with. As institutional arrangements often developed specifically to resolve conflicts of contested Aboriginal-State authority over resources, most co-management arrangements do not have scope for broader inclusion of stakeholders in joint institutional bodies. This has limited the effectiveness of some co-management arrangements as conflict resolution fora. Some “powerful” stakeholders such as recreational and conservation interests may seek other avenues to influence resource management decisions.

While a limited number of co-management arrangements involve equally-shared decision-making authority, these have been plagued with legal difficulties. That many co-management board decisions are made in the form of recommendations to government raises questions about their actual influence. The Inuvialuit experience suggests that governments may prefer to follow recommendations of credible co-management boards for reasons of public image. The James Bay case illustrates that while consensus decisions also stand a good chance to be implemented.

However, decisions may be ignored if implementing agencies are influenced by other interests such as lobby groups. Recent co-management arrangements employ

innovative procedures which prevent recommendations from being ignored. Further innovation is needed to find new ways of integrating Aboriginal and governmental resource management in more effective arrangements of shared authority and decision-making.

Although the experience of co-management has thus far fallen short of espoused ideals, it has involved considerable improvement in terms of the Aboriginal role in the official system of resource management. This should not be viewed as a failure since it seems that the fundamental institutional change implied by co-management can only be effectively met in a gradual manner. Co-management arrangements have provided a forum for learning to undertake collaborative resource management in a cross-cultural context, which, if used to its full potential, should lead to the development new approaches to making decisions affecting the environment which better integrate the knowledge, values, and interests of Aboriginal groups with those of other Canadians.

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