15 **WORKING PAPER**

Sharing the Canadian Experience with Co-Management:

Ideas, Examples and Lessons for Communities in Developing Areas

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Abstract

The aim of this paper is to share Canadian experiences in local-state co-management with local stakeholder communities in developing areas. Examples of co-management in Canada are given and the theories and models that shape what is meant by the term 'co-management'. First, the core principles of co-management are introduced, and then two types of Canadian co-management case studies are outlined. The final section illustrates the key lessons learned from co-management in Canada and notes the conditions that contribute to building a successful co-management regime. These serve, in turn, to suggest strategies that communities might pursue in seeking co-management as a resource management model for their context. Ultimately, the central theme is the critical importance of power-sharing between co-management partners in achieving a joint management system that is effective and equitable in addressing the concerns of the respective participants.

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Introduction: Sharing the Experience of Power

In the past three decades, increasing conflict over diminishing resources has resulted in the search for alternative approaches to the traditional 'top-down', state-centred model of managing natural resources. Researchers broadly agree that a more 'bottom-up' or community-centred approach is preferable, particularly in situations where multiple stakeholders are involved in the use of limited resources (Weiner 1991; Binder and Hanbidge 1994; Kanton et al. 1997; Borrini-Fayerabend et al. 2000; Buckles and Rusnak 1999). In these situations, the over-use or mismanagement of resources means that these ecosystems are often in a state of crisis, a situation compounded as the number of users wishing to access the resource base increases.

A popular alternative approach to multi-stakeholder resource management is the creation of joint management regimes that are based on local stakeholders managing the resource(s) together with state managers. Such cooperative management ('co-management') is based on the assumption that more effective management will result from involving local users in the decision-making process. In many cases, 'more effective management' is typically interpreted by state managers and taken to mean reduced conflict amongst users resulting in enhanced ecosystem or resource health. Moreover, most co-management systems only involve local users in a 'consultative' fashion: local partners are present in the joint decision-making process as 'advisors', not as empowered decision makers. In these scenarios, local stakeholders still have no real power over the decisions affecting the resources being managed. As such, the state remains largely in control of a joint management process that differs little from a top-down model, and stakeholder conflict and environmental degradation continue (Usher 1986; Osherenko 1988; Pinkerton 1989; Finlayson 1994).

In Canada, over two decades of experience with co-management show that for local users, generally aboriginal peoples, such a state-centred definition of co-management failed to meet their needs and interests vis-à-vis the resource(s). For aboriginal peoples in Canada, as for local stakeholders elsewhere, managing resources effectively is intimately related to the economic well-being of these users, and a sense that they have been 'empowered' to have some control over the external accessing of the resources that they depend upon for both subsistence and commercial purposes (Feit 1988; Berkes, et al. 1991; Kanton, et al. 1997). Researchers therefore began to emphasize that a key question concerning the efficacy of co-management is, *to what extent do these management arrangements give local users an effective voice in determining the use and access of local resources* (Nakashima 1991; Mulrennan 1994; Hoekema 1995; Feit 1998; Goetze 1998, Buckles and Rusnak 1999)?

In light of this, the purpose of this report is to convey the Canadian experience with co-management of natural resources for the benefit of local peoples and state managers in developing areas who are interested in multi-stakeholder strategies for managing contested and/or depleted resources. The report builds on an existing working paper (Rusnak 1997) in providing readers with:

(1) An expanded *review* of co-management in Canada;
(2) *Case studies*, which feature long-established co-management models that highlight the importance of *power-sharing* between local stakeholders and the state;
(3) Key *lessons*, including benefits and limitations, for communities seeking greater levels of control over access to and management of local resources via co-management; and
(4) *Conditions* for building effective co-management models that suggest *strategies* to consider in pursuing co-management arrangements.

In providing readers with this information, the central theme of this report revolves around the critical importance of power-sharing between co-management partners.

The devolution of real decision-making authority to local co-managers is key to achieving a joint management system that is effective and equitable in protecting the interests and addressing the management concerns of local stakeholder participants vis-à-vis the resource priorities of the state.

PART 1: What is Co-Management?

1.1 Core Principles of Co-Management

Researchers in Canada have put forward a variety of definitions to answer the question, 'what is co-management?' Osherenko's definition, most often cited in the literature, is an early attempt to define the term, and she notes that it is based on a definition of the term 'regime'; co-management regimes are defined as:

> "institutional arrangements in which government agencies with jurisdiction over resources and user groups enter into an agreement covering a specific geographic region and spelling out: 1) a system of rights and obligations for those interested in the resource; 2) a collection of rules indicating actions that subjects are expected to take under various circumstances; 3) procedures for making collective decisions affecting the interests of government actors, user organizations and individual users" (1988:13).

Other researchers have tended to suggest more general definitions of co-management. Weiner, for instance, defines it as referring to "the sharing of management authority by more than one subdivision of government or other parties" (1991:5). Berkes, George and Preston suggest, "the term broadly refers to various levels of integration of local and state-level management systems. Co-management [involves] the sharing of power and responsibility between the government and local resource users" (1991:6). Feit, again speaking generally, states that "co-management…involves some working arrangement between state-mandated agents and individuals or groups of wildlife users who themselves have a role in managing the resources…co-management may serve as an important institution linking self-managers and state-managers" (1988:39).

To summarize: in the Canadian context, co-management broadly refers to a negotiated legal agreement between local stakeholders and the state to jointly manage an identified natural resource. Being a very broad statement, such a definition leads to further questions and is open to a variety of interpretations by both state managers and local stakeholders. Since there is no widely accepted, *comprehensive* definition of co-management (Berkes et al. 1991; Berkes 1994; Ivanitz 1996), it is best to begin by looking at the key principles by which co-management regimes typically operate in order to understand what co-management does and how it works.

A. Cooperation in decision-making

In Canada, the parties to an agreement typically include provincial governments and aboriginal peoples with outstanding political claims against the state. However, in many cases, other local stakeholders are participants in the process, and this is more common in co-management that emerges from an (impending) environmental crisis. In rare instances, this includes industry representatives. Regardless of who is involved, cooperation between stakeholders is the core principle of co-management in that it seeks to promote a 'team effort' among stakeholders (Jacobsohn 1993). Once a basic level of cooperation is established, it can be broadened gradually to include a variety of management responsibilities. It is key to remember that co-management is less about managing *resources* and more about managing relationships between *people* (Usher 1986, Pinkerton 1989, Finlayson 1994, Hoekema 1995); more specifically, it is about redefining or negotiating new relationships between people with varying interests in, and varying degrees of authority over, the resource (Goetze 1998 and 2002). These new relationships are ideally characterized by cooperation, as opposed to competition. With that as the primary concern, institutions for management must be designed to facilitate this process. While the institutions are important as vehicles for cooperative efforts, they are most effective insofar as they provide a forum for promoting relationships of mutual trust and open communication. The principle of *partnership*, of

working towards creating mutual interests among stakeholders once in competition, is central in building effective co-management systems.

B. Compromise and mediation

All parties concerned need to compromise for co-management to be successful. In order for decisions to be made, differences in interests and cultural values must be identified, discussed and, in most cases, adjusted. Expectations similarly must be clearly voiced and negotiated. The objective is for actors once engaged in antagonistic relations defined by competition and conflict to become partners in the cooperative framework. The idea is to *create an alliance* out of stakeholders who are typically adversaries in disagreement on a variety of levels (Cassidy and Dale 1988). The mediation of these differing interests is an ongoing process, for it is likely that they will never be truly reconciled. Instead, the idea is to integrate these various interests into a broader common goal; usually, this relates primarily to the sustainable use, management and development of the resource(s).

C. Sharing power with local stakeholders

Co-management is based most importantly on the principle of power-sharing, typically between state agencies and local users. In this sense, there is a provision for the *devolution of decision-making authority* to the local level (Osherenko 1988; Berkes et al. 1991; Wiener 1991). The idea is to make resource management more of a 'bottom-up' approach by promoting cooperation between state managers and local stakeholders. Even so, the transfer of decision-making authority does not necessarily involve a significant shift in power relations between local communities and the state, because it often does not involve the transfer of legislative authority (Goetze 1998). Although various participants may use the term 'co-management' to imply equality between stakeholders, it is not usefully designed to create absolute equality in the power relations between parties to the agreement. Nor could it, given that national or

regional governments are key stakeholders in all resource management. Therefore, arrangements for sharing authority in co-management must be carefully considered, since it is highly unlikely that each stakeholder in a resource management process could wield the same level of authority: in most cases, local users do not have the money nor the political influence that state and industrial stakeholders enjoy (Ivanitz 1996). The notion of having shared decision-making refers more to the fact that multiple parties are involved in the process. It does not mean that they all have the same amount of either political or economic power within that process.

Clearly, several ambiguities remain in the meaning of co-management, particularly in applying the principle of power-sharing between state managers and local stakeholders. As a result, when putting co-management agreements *into practice*, a wide variety of provisions for mediation, cooperation and sharing power has emerged. In reality, then, the term 'co-management' includes a broad spectrum of joint management arrangements.

1.2 Building Co-Management: Basic Elements

Although co-management systems are basically similar, their design often accords with the specific requirements of a particular resource or ecosystem and the particular demands of local stakeholders. In Canada, the latter typically include indigenous peoples with political agendas that are strongly tied to control over lands and resources. Thus, co-management regimes differ considerably in practice, as a result of the numerous ways in which certain basic elements are mobilized.

A. Reasons for initiating co-management

Many factors prompt the pursuit of co-management in an area. They usually include one or several of the following:

▪ Signs of decline in the resource(s) of importance to multiple users;

- Advanced crisis in the resource(s) important to multiple users;
- Conflict and/or competition between local stakeholders over use, access, allocation and/ or development of the resource(s);
- Conflict over resource management strategies and/or planning between state managers and local users;
- Conflict between indigenous and state management systems;
- Indigenous demands for participation in resource management on their claimed traditional territories; and/or
- Protection of indigenous interests where treaties are being negotiated.

Ultimately, the key motivational factor for developing co-management systems is *the real or perceived mismanagement* of the resource(s), stemming from or leading to conflict between stakeholders (Osherenko 1988; Doubleday 1989; Pinkerton 1989; Berkes et al. 1991, Weiner 1991; Notzke 1994; Goetze 1998).

B. Legal bases of co-management

In Canada, co-management systems may be recognized as either *claims-based* or *crisis-based* legal agreements. *Claims-based agreements* set up shared bodies for managing resources in a land claim settlement area. They often are initiated by similar concerns for the health of one or many resources due to mismanagement or the incursion of development. However, land claims are part of a larger legal framework in Canada that recognizes the process of land claims negotiations as both a necessary and legitimate process for improving relations with aboriginal peoples (Berkes 1989; Doubleday 1989; RCAP 1996). In these types of agreements, co-management is only one aspect of a series of provisions that involves the devolution of various degrees of governance authority to aboriginal peoples. Part 2 reviews the James Bay and Northern Quebec Agreement as an example of co-management that is included as part of a land claims agreement.

Alternatively, co-management systems may be initiated as a sort of 'emergency measure' to address what is seen as a growing ecological crisis, which often leads to related political and/or economic crises in the form of protests and boycotts. Such *crisis-based agreements* are established as more immediate stopgap measures designed to protect one or more resources from further development incursions, perceived mismanagement or unsustainable use due to unregulated competition. Often, such agreements are negotiated to address a growing conflict (1) between local resource users and the state management system; (2) between local stakeholders and state-sanctioned industry or development; and/or (3) among local stakeholders themselves (Goetze 1998). Where aboriginal peoples are involved, co-management of this nature may be designed to protect their claimed rights to authority over traditional lands and resources during, or in anticipation of, a process of broader land claims negotiations. The Central Region Board, in Clayoquot Sound, British Columbia provides an excellent example of this and is discussed further in Part 2.

C. Objectives of co-management

While many co-management agreements are in operation in Canada, the goals of sharing management responsibility with local stakeholders are similar, and easily identified (Osherenko 1988; Pinkerton 1989; Berkes et al. 1991; Weiner 1991; RCAP 1996). Typically, the objectives of co-management include one or all of the following:

- Resource protection, enhancement and conservation;
- Coordination of use, planning and management strategies;
- The integration of state and local/indigenous management and/or knowledge systems;
- Conflict resolution;
- Promoting sustainable economic development opportunities for local stakeholders; and

- Protection of indigenous rights and interests in an area of outstanding political claim.

Above all, the *main objective* of most co-management regimes is resource management that is "more appropriate, more efficient, and more equitable" (Pinkerton 1989:5).

These primary objectives may be further enhanced when associated with one or more of the *secondary goals* of sharing management responsibilities (Pinkerton 1989; Usher 1993; Goetze 1998), which include co-management as a means of achieving:

- Community-based development,
- Decentralized decision-making,
- Long-term, community-based conflict management,
- Revitalized indigenous cultural practices or knowledge systems that are resource related,
- Strengthened indigenous leadership,
- Protected or enhanced subsistence economy, and
- State confidence in community-based, decision-making processes.

D. The management focus

Co-management systems may be *resource specific*, focusing on a single resource such as fisheries or a species of wildlife such as caribou. Examples of this type of co-management system include the Beverly-Kaminuriak Caribou Management Board (Usher 1993), and the Wendaben [Forestry] Stewardship Authority (Benidickson 1996). Alternatively, agreements may be *comprehensive*, involving several resources or areas of resource management, including forestry, mining, wildlife, parks and general land use planning. This sort of co-management is exemplified in the James Bay Coordinating Committee on Hunting, Fishing and Trapping (Feit 1989), the Inuvialuit

Final Agreement (Doubleday 1989) and the Gwich'in Renewable Resource Board (Spak 2002).

The focus of management may vary also in that different agreements will accord different levels of significance to the various functions of resource management. Moreover, they may focus more or less energy on activities such as allocation, enhancement, access, planning and development, enforcement, protection, extraction procedures and regulation, to name but a few.

E. Provisions for co-management

Swerdfager (1992) outlines the six general provisions typically included as institutional and operational basics for co-management boards:

- Collectively formulated *decisions*, which make clear the meaning of terms used.
- *Principles* that guide all concepts, plans and actions of the board. Principles set the tone for the rest of the agreement. Common co-management principles included conservation, sustainability and/or stewardship in management; cooperation in management, implementation, decision-making and enforcement; shared interest in and use of a commonly held resource; links to other management initiatives at the regional, national or international level; and consideration for the interests of non-signatory stakeholders in the area.

- Explicitly articulated *objectives* with measurable results in order to clarify the goals of the agreement.

- An outline of the *scope* of the agreement in terms of the geographical region involved, the parties to the agreement, the management issues to be considered by the agreement and its relation to other management activities in the area.

- A description of the *management structures*. This determines the power relations between stakeholders and outlines the authority, responsibilities and duties of the management body. It should clarify issues such as membership and representation, allowances for public participation and degree of incorporation of expressed public opinion, and the harvest rights, needs and allocations for each stakeholder involved in or affected by the agreement.

- A section on *implementation* of the agreement that delimits the conditions for fulfilling the objectives and responsibilities of the management body. This should include eligibility criteria; methods of enforcement of the agreement and management decisions; deadlines for implementation of agreement and decisions; funding source(s); level and timelines for distribution; and a 'variance clause' with provisions for the review, evaluation and modification of the agreement as well as a mechanism for dispute resolution.

Clearly, there is a wide spectrum of possible configurations in building a co-management regime. For this reason, it is difficult to formulate a system of classification for co-management that captures a structural and processual commonality among the existing models. The situation may appear further complicated upon closer examination, which reveals that, in the process of implementing co-management, boards have access to different levels of authority in the decision-making process.

1.3 Implementing Co-Management: The Challenge of Authority

In addition to the variations that emerge in the motivations, scope and objectives of co-management systems, a significant difference exists in the level of authority available to the parties to an agreement to 'jointly' manage natural resources. The terms 'participation', 'power-sharing' and 'decision-making' can each *imply* various degrees of

authority between local participants and the state with which they have entered a legal agreement.

Co-management typically operates through *management boards* comprised of equal numbers of indigenous or local stakeholder representatives and state managers. They also include a chair, sometimes independent. Many co-management boards begin with a focus on resource protection or enhancement initiatives, a concern for all parties involved and therefore usually the most easily pursued as regards making decisions jointly.

It is precisely at this point of implementation, in terms of *applying* the decision-making process, that it becomes clear that a key difference in co-management regimes lies in *the degree of decision-making power legally accorded the local stakeholders*. Researchers and local participants alike argue that 'real' co-management involves legally entrenched, shared decision-making power by equally enabled partners, which requires governments to devolve a measure of power to local partners. However, in reality, years of putting co-management into practice reveal, "there is a wide variety of partnership arrangements that involve various degrees of power-sharing" (Berkes 1994:18).

As a result of this noticeable trend, several analyses of co-management refer to a sort of *continuum of power-sharing* along which various co-management models may be plotted. At one end, state authority is emphasized; at the other, local authority is stronger.

▪ Berkes, George and Preston (1991) formulate a particularly detailed co-management continuum. Based on a ladder analogy, participation in co-management is conceptualized as rungs that progress from lower levels of negligible power to higher levels of substantial power-sharing and authority in decision-making. The end result is a *range of systems* beginning with those in

which communities are only involved in research ('informing'), to those that provide for local management of local resources ('partnership').

▪ Kearney (1989) reduces the various fisheries co-management arrangements into three categories that reflect the level of power-sharing between government and local users: (1) government remains the only decision maker, while seeking the advice of local users in a process of consultation; (2) local users implement and enforce government management strategies, accepting them as beneficial; and (3) local users are involved in decision-making in a process of 'comprehensive participation' that includes policy formulation, acceptance and implementation.

▪ Ivanitz (1996) asserts that within a wide range of structural forms, three models of co-management are most common: advisory boards, management boards and joint stewardship boards. Advisory boards are the 'most basic' co-management structure and have no decision-making power of their own; power is limited to making recommendations to ministers. Management boards are 'mid-range' on the scale of power-sharing in that they may make some management decisions, which often, but not always, are binding. Joint stewardship boards are the most autonomous and the most powerful of co-management regimes. These boards are totally decentralized and have input into all areas of decision-making within the area of board jurisdiction. They have decision-making powers equal to that of government.

In considering how far co-management shares power with local stakeholders, particularly indigenous peoples, other criteria also should be taken into account. Wiener (1991) suggests that the *level of authority for enforcement* needs to be considered. The authority of 'external enforcement' would give the co-managers the power to enforce decisions against non-signatories operating within the geographical region of the agreement, or whose resource-related activities affect the resources covered by the agreement. Conversely, authority limited to 'internal enforcement' would limit participants to enforcing decisions only against parties to the agreement. Clearly,

possessing the authority to enforce management decisions externally would represent an elevated level of power-sharing.

A second important consideration is the *source of local authority*, whether it is delegated by the state or emerges from independent authority. In determining whether authority is independent of government delegation, its source must be examined. For instance, 'independent authority' might be one that is based on recognition of indigenous authority over territories, or the legitimacy of traditional ecological knowledge. Thus, one should ask, is the authority of the co-management board negotiated with or delegated by government? Certainly from the perspective of indigenous peoples with historical treaty claims against the state, co-management regimes whose authority is based on negotiation between autonomous political actors as opposed to government-delegated authority rank higher on the continuum than ones that are not (Weiner 1991).

Decision-making power also might be augmented in co-management agreements with the inclusion of *veto power for local co-managers*. This is especially useful for indigenous participants whose interests are not protected by other legal provisions, such as treaties. As such, a veto would serve to protect indigenous rights or territories until treaty claims are resolved (Wiener 1991; Goetze 1998 and 2002). The extent to which indigenous co-managers realistically might exercise that veto, as a means of leverage against government decisions or policies that infringe on those rights or interests, should be considered.

Taking these criteria together, the continuum of co-management power-sharing may be conceptualized as having, at the highest level, maximal power-sharing in decision-making through co-management boards with a negotiated, independent base of authority, legally binding decisions that are externally enforceable and veto power over government decisions affecting traditional territories or protected interests (Figure 1).

Minimal Power → Moderate Power → Maximal Power						
INFORMING Community is informed about rules, regulations and decisions already made by government.	COOPERATION Community starts to have advisory input into management, e.g., use of local knowledge/ indigenous research assistants.	COMMUNICATION Start of government-user information exchange; local concerns begin to enter into management plans and/or research agendas.	ADVISORY COMMITTEES Partnership in decision-making starts; search for and/or joint action on common objectives begins.	MANAGEMENT BOARDS Community participation in decision-making; involves developing and implementing management plans.	COMMUNITY CONTROL Partnership of equals in which joint decision-making is institutionalized; resources managed locally.	Berkes et al. 1991
Government remains the only decision maker, while seeking the advice of local users in a process of consultation.		Implementation and enforcement of government management strategies by local users who accept these as beneficial.		Local users are involved in decision-making; 'comprehensive participation' that includes policy formulation, acceptance and implementation.		Kearney 1989
MOST BASIC Advisory co-management structures, with no decision-making power of their own; power is limited to making recommendations to ministers.		MID-RANGE Management boards that may make some management decisions, which often, but not always, are binding.		MOST AUTONOMOUS Joint stewardship boards that are totally decentralized and have input into all decision-making within areas of board jurisdiction; decision-making powers equal to government.		Ivanitz 1996
Boards with state-delegated authority, and consultative status, whose decisions are non-binding and can only be enforced upon parties to the agreement. Local/indigenous participants have little or no leverage over government decisions that may negatively affect their traditional territories. Ultimate authority to accept decisions remains with ministers. Traditional ecological knowledge is not integrated into management decisions or plans.			Boards with negotiated, independent and determinative authority, whose decisions are legally binding on all actors engaged in activities that affect the resource(s) within the board's jurisdiction. Local/indigenous participants have veto power over government decisions affecting resources in their traditional territories covered by the agreement. Traditional ecological knowledge informs both management decisions and planning.			Other

Figure 1. The Co-Management Continuum. The spectrum of power-sharing possibilities in co-management regimes (from Goetze 1998).

In implementing co-management, it is important to pay attention to the question of whether real power-sharing will take place at the board level or whether "a coordinating committee is used just to ratify decisions taken elsewhere within the state apparatus" (Hoekema 1995:181). Certainly, governments will be reluctant to negotiate maximal power-sharing arrangements without good reason, which usually involves a combination of events involving a crisis in the resource, significant political pressure and/or a considerable threat to a regional economy. When leveraged by local stakeholders, such conditions increase their negotiating position in seeking greater authority in joint management arrangements. The importance of capitalizing on such contextual realities when negotiating co-management with the state cannot be overstated. Such strategies can prove highly effective for gaining increased devolution of decision-making power for local co-managers.

Note, however, that even facing such conditions, governments in Canada continue to resist sharing determinative authority with local-level co-management boards, including those involving indigenous peoples with legally recognized rights to resources. This has been the case with resources such as fisheries or forestry. Governments in other settler states with encapsulated indigenous populations have been equally loath to devolve significant power to co-management boards. This is despite the fact that a significant amount of knowledge of the resource base and the motivation for its sustainable use lie with local users. Given this understanding, it makes the most sense for management "to have as much local-level control and responsibility as possible and only so much government regulation as necessary" (Berkes 1994:20).

PART 2: The Canadian Experience

Co-management has been available as a resource management alternative in Canada since the 1970s when the first such agreement was negotiated to resolve ongoing conflict over resource extraction in the Province of Quebec. In the last three decades, numerous co-management agreements have been negotiated, mostly with indigenous peoples as they typically seek to address unresolved claims against the Canadian state for increased aboriginal autonomy within the liberal-democratic system. A central part of these claims concerns the control and use of traditional indigenous territories and their resources.[1] As such, resource co-management is often only one aspect of much broader treaties between indigenous peoples and the provincial and federal governments that seek to shift the relationship from one of aboriginal dependency to one based on aboriginal self-determination and indigenous – state partnership in affairs of mutual interest.[2] These areas of mutual interest necessarily involve the use, access, management and ownership of lands and waters and their available resources.

2.1 Claims-Based Agreements

Claims-based co-management agreements are best described as negotiated, long-term legal agreements that establish shared bodies for managing resources in an area claimed as being of traditional indigenous occupation, use or interest. Increasing incursions upon a resource base in the form of development or resource extraction often prompt such agreements (Berkes 1989; Doubleday 1989). In Canada, they are negotiated exclusively with aboriginal peoples in relation to outstanding political claims against the state in regard to the recognition, protection and practice of inherent

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[1] However, examples of local community-based management committees instituted to 'advise' state managers are emerging in the absence of indigenous claims.

[2] In Canada, the provinces hold jurisdiction over resources and their management, so co-management agreements are negotiated with provincial governments. The federal government, however, has primary jurisdiction over aboriginal affairs and development in northern regions, so broad land claim treaties are negotiated with both the federal and provincial governments.

aboriginal rights, which include title rights to lands and resources, and rights to self-determination and self-government (Usher 1986, Goetze 1998). Since land claims agreements are based on indigenous demands for the ability to apply these rights within the settler state system, they necessarily involve provisions for the allocation, use and management of natural resources.

The many examples of this form of co-management in Canada include the 1978 Northeastern Quebec Agreement, 1984 Inuvialuit Final Agreement and the 1993 Nunavut Land Claims Agreement. In many cases, the provisions for co-management are only a part of a larger agreement that provides for broader structures of aboriginal governance, including education, justice and health care. Such is the case for the James Bay and Northern Quebec Agreement (JBNQA) signed between the Cree of James Bay, the Inuit of northern Quebec, the Province of Quebec and the federal government in 1975. As the first negotiated co-management agreement in Canada (Berkes 1989; Feit 1989), the JBNQA also represents a good example of a claims-based agreement for further discussion, given the depth of experience that has emerged while implementing provisions.

The James Bay Experience

The James Bay experience with co-management began, like many others, with the proposal of a new resource development project with serious implications for the health of the environment upon which Cree and Inuit relied for their subsistence and commercial use. In this case, it was a hydroelectric initiative that would radically alter the landscape and environment of the northern Quebec and James Bay region where the Cree and Inuit had maintained traditional hunter-gatherer lifestyles, including various subsistence hunting, trapping and fishing activities (Feit 1988). For many years, researchers have documented and espoused the sophisticated and well-developed quality of this traditional 'self-management' system of resource monitoring, allocation and use (Scott 1979; Feit 1988 and 1989). Prior to the proposal of

hydroelectric development in the north of Quebec, Cree and Inuit had enjoyed long-term success with the sustainable use and management of natural resources. For years, Cree and Inuit had taken issue with increasing intrusion into their traditional lands by developers, but when they challenged the new project in court, the provincial government took note.

The James Bay Hydroelectric Development Project is a mega-project aimed at constructing dams to provide power for Quebec residents and for sale abroad. Under the shadow of such large-scale development, the Cree and Inuit were motivated largely by the strong desire to protect, as much as possible, their indigenous lifeways (Cassidy and Dale 1988). Their primary concern in negotiating their land claim was to allow these subsistence activities to continue largely through provisions that would secure the protection of lands and resources. After several years of difficult negotiations, a final tripartite agreement was signed in November 1975 with the federal and provincial governments.

Provisions of the Agreement

As a comprehensive land claim, the JBNQA includes a wide range of provisions that provides the Cree and Inuit with cash compensation for lands lost to dam development, income security for subsistence resource users, and self-government powers including health care, education and justice. There are also provisions for full control over certain lands, social and environmental impact assessment of all development initiatives, and social and economic development for aboriginal partners. Provisions relating broadly to resource management include: (1) exclusive aboriginal harvesting rights reserved in certain land areas; (2) priority for aboriginal harvesting and guaranteed levels of aboriginal harvest in other land areas, subject to conservation objectives; (3) reservation of certain species of fish and wildlife for exclusive aboriginal use; and (4) recognition of elements of the traditional indigenous system of resource management (Berkes 1989, Feit 1989 and 1998).

In terms of co-management, the JBNQA created the Hunting, Fishing, and Trapping Coordinating Committee, a board for the joint management of resources between the provincial government and the aboriginal parties to the Agreement.[3] The Committee consists of eight aboriginal and eight state representatives, and has a secretariat and three resource-specific working groups associated with it. According to the JBNQA, the Committee is the primary forum for all matters relating to wildlife in the JBNQA area, whether taken up by Cree or the Province. The Coordinating Committee's responsibilities include recommending conservation measures, dealing with management-related information, supervising harvest research and participating in environmental impact assessments. It also acts as "a forum for Native concerns" (Berkes 1989:192). In terms of the level of authority the Committee enjoys, aboriginal negotiators insisted that they have final decision-making authority, or equal authority to that of the state managers. So, the Agreement recognizes state authority, while constraining and limiting it, but it also recognizes aboriginal authority. Unfortunately, it fails to provide the indigenous partners with equal financial resources and legal standing. Ultimately, although the parties agreed on the creation of the Coordinating Committee in negotiations, the matter of power-sharing and control of the joint system was left unresolved, and the board was established as "primarily a consultative body" (Feit 1989:82). As such, the Committee is an advisory board that is limited to making recommendations, albeit directly, to the relevant provincial or federal minister (Berkes 1989).

JBNQA Co-Management in Practice

In the years since JBNQA negotiation, researchers have considered the implementation of co-management and concluded that it "appears to be only partially workable" and have highlighted a number of issues yet to be resolved (Feit 1989:82). As with many legal agreements, the resulting system is complex and heavily

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[3] Co-management also exists over forestry though the environment regime, but it has not been implemented (see Feit and Beaulieu 2001).

bureaucratized. The provisions of JBNQA are complicated and have caused confusion and endless debate over interpretation (Berkes 1989). In terms of decision-making, the process can become stalled over the different priorities of participants in the north and south of the vast agreement area. Important issues become mired in the minutiae of procedures (Feit 1989). More importantly, the Coordinating Committee has only an advisory function and its recommendations are often ignored, particularly if they go against existing policies. Further, rejections often arrive without explanation from the minister (Berkes 1989). In other words, the Committee has no mandate to make decisions; it has no legal authority or binding leverage over the behaviour of government managers. In practice, governments continue to regard the Committee as an institution to be "consulted only casually and after major policy decisions have been made rather than as an integrated system of advice with a role in all stages of government policy development and implementation" (Feit 1989:83).

In addition, while the Coordinating Committee may include other stakeholders such as recreational fishers via government representation, many resent the provision for exclusive aboriginal harvest rights over certain areas and species. This has become the source of tension and conflict between Cree and sport fishers. Yet the government refuses to let the Committee deal with such conflicts, even though aboriginal members wish to work to resolve them (Feit 2001). Also, government managers have been reluctant to implement provisions regarding aboriginal priority rights to resource harvesting and have not always acted in the interest of conservation needs in formulating policy, responding instead to the lobbying of non-aboriginal interest groups (Feit 1989). Other issues identified include communication difficulties between the four language groups, a lack of focus on long-term issues, absenteeism of government representatives, a low level of confidence in aboriginal management systems and a structure that is culturally foreign to traditional subsistence users (Berkes 1989:203-4), a lack of funds for policing non-aboriginal activity, and a lack of enforcement on the part of governments (Feit 1989).

Initial research found that the James Bay Agreement promoted "greater local participation in living resources management" and was "generally successful in meeting some of the broader policy objectives" laid out in the Agreement (Berkes 1989:200). A decade later, such a vision of success has been tempered by observations highlighting the difficulties experienced by Cree participants in trying to protect their hunting interests vis-à-vis the disruptive presence of sport hunters; in recent years, the Cree have sensed a loss of control and authority over the activities taking place on their territories, despite their participation in the JBNQA (Scott and Webber 2001). On the other hand, a clearly significant accomplishment may be found in securing government recognition of aboriginal rights and priorities to natural resources, and legally protecting those rights from unilateral government extinguishment (Feit 1989). The JBNQA also has control of the development of outfitting operations and commercial fisheries. In this way, it provides certain safeguards for aboriginal participants, meaning they are in a strong legal position that allows them to control their territories and therefore "have a better chance to escape marginalization in their own land" than other indigenous groups without agreements (Berkes 1989:197).

Since the Agreement recognizes the existence, utility and value of aboriginal self-management systems, and limits the amount of government control in applying these systems, the Committee has not had to wrestle with government managers over the indigenous ability to effectively manage resources. Initially, aboriginal peoples continued to manage and harvest resources in essentially the same independent manner as prior to the Agreement, yet with the added benefit of a reduction of government interference via regulation (Feit 1989).[4] Into the 1990s, however, the increasing activities of sport hunters and the forestry industry have seriously disrupted this situation; matters are currently in dispute between parties to the Agreement (Feit 2001; Scott and Webber 2001). The Committee also is involved in social and

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[4] The same may not be said, however, for forestry issues, where Cree rights have been soundly ignored (Feit, personal communication, 2003).

environmental impact assessments, meaning that the aboriginal voice is always present in evaluating new development proposals on their territories. Finally, traditional knowledge has been integrated successfully into the shared management process under the JBNQA. Aboriginal parties to the Agreement have been employed as researchers in cooperatively run projects, have access to research results and generally enjoy an increased level of influence over the direction of resource-related research via direct input, a consultation requirement, and the control of permits (Berkes 1989).

2.2 Crisis-Based Agreements

Crisis-based agreements are typically negotiated as stopgap or emergency institutional arrangements designed to protect one or more resources immediately threatened by development, over-use or mismanagement. The crisis may not be limited to the state of the resource, but may include the related conflict involving any combination of local stakeholders, industry, governments and other interest groups, such as environmental organizations. While these may include a variety of stakeholders, in Canada they typically involve aboriginal peoples and state managers as participants. In these cases, the agreements aim to protect and preserve lands and resources claimed by an aboriginal group while a more comprehensive land claim is being negotiated. As such, they are often referred to, either formally or informally, as 'interim measures' agreements, and have a limited term of application pending the finalization of the ongoing land claims negotiations.

Examples of crisis-based agreements include the Wendaban Stewardship Authority that provides for the joint management of an old-growth forest area in northern Ontario claimed by the Teme-Augama Anishinabai while their land claim process proceeds (RCAP 1996). Similar to the Teme-Augama case, the Central Region Board (CRB) was created to jointly manage, among other resources, a large area of old-growth forests on the west coast of Vancouver Island in British Columbia. As an interim measure,

however, the CRB is unique in the degree of power it shares with aboriginal parties to the agreement. In this way, it represents an excellent model of 'empowered' co-management that may be negotiated between governments and local stakeholders.

The Central Region Board Experience

The Central Region Board was created in 1994 under the *Interim Measures Agreement for Clayoquot Sound* (IMA), signed by the Central Region Nuu-chah-nulth First Nations and the provincial government of British Columbia. The Agreement arose out of both resistance and negotiation between local peoples and the state. In this sense, co-management in Clayoquot Sound emerged from a combination of the massive 1993 protests over abusive forest practices in the area, Nuu-chah-nulth alliances with powerful international conservation groups and the persistent lobbying efforts of the Nuu-chah-nulth First Nations for recognition of their rights to lands and resources in the area. Prior to the negotiation of the IMA, resource management and land use planning in Clayoquot Sound was problematic from a number of perspectives. Overall, the provincial government's approach used for managing the area's primary resource, temperate rainforests, could be described as unsustainable and negligent. Forestry corporations pursued their ambitions for short-term profit through maximally efficient extraction with little interference from the Province, whose objective was to encourage economic development and job creation in British Columbia (Drushka 1993).

Having become a powerhouse in British Columbia's resource-based economy, the forest industry exerted increasing influence on provincial management policy. Local interests were of secondary concern, if any. Compliance with forestry guidelines to protect other resource values such as salmon spawning streams, recreation and tourism was relegated to a system of self-policing. Community consultation was cursory, and the provincial government's policy regarding aboriginal consultation, participation and protection of rights was only marginally acknowledged by forestry

companies, if at all. The political and economic incentive for timber extraction meant that the Province routinely ignored enforcing these policies (Pinkerton 1993).

After years of environmental protest, months of civil disobedience and mounting national and international pressure, the Province of British Columbia entered into negotiations with the Nuu-chah-nulth First Nations. The Province of BC and the five Nuu-chah-nulth Nations with traditional territories in the area signed the IMA in March 1994. It was designed as an emergency measure to protect the lands and resources to which the Nuu-chah-nulth laid claim as part of the extended process of treaty negotiations with the provincial and federal governments. It was also aimed at reducing the conflict between local stakeholders, government and industry with competing interests in the area.

Provisions of the Agreement

The provisions for resource management in the IMA centre on the creation of a new, cooperative management institution, the Central Region Board, designed to oversee all land-use decisions in Clayoquot Sound. Board membership consists of five Nuu-chah-nulth, five provincial representatives and two co-chairs, one Nuu-chah-nulth and one provincial. The Province soon opened up its membership to be held by representatives of local non-native interests. So, in reality, local community members representing the tourism, hospitality, logging, environmental, administrative and political interests of local non-native stakeholders in Clayoquot hold the five provincial seats on the CRB. The provincial co-chair alone is directly representative of the Province's interests.

Primarily, the CRB is mandated to (1) review all resource-related policies, plans and proposals, whether from government ministries, local developers, or forestry corporations, and (2) approve, reject or defer, pending suggested modifications, proposals according to the resource management objectives of the IMA. These include conserving existing resources, protecting and restoring ecological integrity, ensuring sustainability, promoting diversified economic development, and respecting and

protecting aboriginal heritage and uses of resources in Clayoquot Sound (Sinclair 1994).

However, since the IMA covers the management of all lands and resources in the Agreement area, the responsibilities of the Board are broad. The CRB is charged also with encouraging conciliation between stakeholders in the Sound, protecting Nuu-chah-nulth rights and promoting integrated management of marine and terrestrial resources. In addition, the Board must implement the many recommendations of the Scientific Panel for Sustainable Forest Practices in Clayoquot Sound, designed to establish a system of 'world-class forestry' in the Sound. Finally, it is to participate in the Clayoquot Sound Planning Process, a process to introduce a new form of ecosystem/community-based land use planning to the region (Sinclair 1994).

Interestingly, the IMA contains provisions regarding a significant degree of decision-making authority for aboriginal participants sitting on the CRB. The Agreement allows for the CRB to reach its decisions by vote or consensus. Since its inception, the Board has operated by consensus, a slower but more inclusive process. Should voting be necessary, a 'double majority' clause would come into effect. As understood by Nuu-chah-nulth, this means that a majority of Nuu-chah-nulth as well as a majority of all CRB members is required for a decision to pass. As the Province understands it, double majority requires a majority of both Nuu-chah-nulth and provincial representatives. Either way, the clause gives the Nuu-chah-nulth participants veto power over decisions that may negatively affect their interests. Although the provincial cabinet may overturn CRB decisions, if this occurs, the Central Region Resource Council (CRRC), composed of Nuu-chah-nulth Hereditary Chiefs and cabinet ministers, would be assembled to conduct a public inquiry into the reversal. Given the inherent volatility of resource issues in Clayoquot Sound, this is a situation the provincial government would rather avoid (Goetze 1998).

The presence of the 'veto' element is unique to this co-management agreement in Canada and, along with recourse to the CRRC, is what moves the IMA beyond consultation to what can be called substantive power-sharing. Under the IMA, Central Region Nuu-chah-nulth have real, determinative authority to *make decisions* about resource use in Clayoquot Sound. In the history of its operation, the CRB has never invoked double majority, and there has been no attempt to reverse any of its decisions regarding resource management and land use in Clayoquot Sound. The level of control the CRB affords Central Region Nuu-chah-nulth over the management of resources on their traditional territories may be referred to as 'empowered' co-management, because it exceeds the 'advisory powers' that co-management regimes typically grant indigenous participants (Goetze 1998 and 2002).

The Central Region Board in Practice

As part of the cooperative management of all natural resources in Clayoquot Sound, except ocean fisheries, the Board reviews all resource use and development proposals.[5] In making its decisions, the CRB receives most of its referrals from the Ministry of Forests (MOF) and the Ministry of Environment, Lands, and Parks (MELP). All the forest harvesting applications the Board has reviewed have been approved, but modifications were made to many. For instance, the modifications involved demanding stricter compliance with new management guidelines, including: ensuring the integrity of biodiversity in a cutblock; completing inventories and maps of medicinal plants, sacred sites and culturally modified trees important to Nuu-chah-nulth within areas to be harvested; and increasing opportunities for skills training and economic development for local people, especially First Nations. Many referrals from the Lands branch of MELP on wildlife management, foreshore development and aquaculture also have involved conditional approval; a few have been deferred because of a lack of

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[5] Ocean fisheries are the jurisdiction of the federal Department of Oceans and Fisheries. Since IMA negotiations were strictly bilateral, between the Government of British Columbia and Central Region Nuu-chah-nulth, fisheries such as the salmon fishery could not be included in the mandate of the CRB. However, the IMA does cover foreshore fisheries such as aquaculture, and the harvesting of marine resources such as oysters and clams.

information, and others denied. Clearly, suggestions that the CRB is merely 'rubber-stamping' government initiatives for resource development are misplaced.

Although the CRB has proved to be a significant improvement to past methods of managing resources in Clayoquot Sound, it is not flawless. Implementation is a typical area of challenge in all negotiated agreements, but particularly so with arrangements that alter the power dynamic between government and local communities. The significant leverage negotiated by the Nuu-chah-nulth in a power-sharing arrangement with government, together with the omnipresent threat of environmental protest, has checked more serious government stonewalling in implementing IMA provisions. Still, the ministries and government agencies involved in management activities remained unclear on the provisions and objectives of the Agreement and the scope and authority of the CRB after 5 years of operation. On occasion, government ministries have dealt with the Board as an advisory 'referral' body rather than a decision-making body as established under the IMA, and have ignored Board decisions. This bureaucratic resistance to working with the CRB has resulted in delays in implementing Board decisions and other aspects of the IMA. Compounding this resistance is the failure of the Cabinet to encourage ministry compliance with CRB decisions. Communication is lacking also between the Board and the provincial government. Although an annual meeting should be held between the CRB and the relevant Cabinet Ministers, these meetings have been delayed, and are often too short to address some of the issues that are causing delays in the process.

A similar challenge presented itself in terms of community awareness of the function and objectives of the CRB, and with communicating the mission of the CRB to local communities. As a result, the Board took steps to ameliorate local communication by distributing newsletters on Board operations and decisions, opening up meetings to the public, and making its minutes publicly available. Difficulties have occurred in spelling out an overall strategy to guide the CRB in its operations. Until 1997, most of the Board's energy was directed towards short-term issues such as reviewing applications for logging permits, at the expense of dealing with long-term transition issues such as

economic diversification and developing plans for viable forestry in the Sound. Being continually inundated with resource or conflict-oriented crisis situations impedes the Board's ability to put its energy toward strategic planning.

Another area of difficulty involves the time-consuming nature of the consensus decision-making process. While it may produce strongly supportable decisions as compared to voting, it has proved problematic for some provincial representatives to adjust to this slower process, which seeks to incorporate divergent views. Lastly, the new resource management process is complex in terms of meeting updated ecosystem management and regional planning recommendations and working with a decision-making body that is community controlled and consensus based. This has slowed the pace of resource extraction and is straining the personal and financial resources of the parties involved. There is no doubt that in the period of transition, co-management can prove to be a slower, more costly and more administratively complex process (Goetze 1998). The fact that the CRB has encountered these problems, some of them typical among co-management regimes elsewhere and others a result of operating in an extremely complex and at times hostile context, is to be expected. With time and continued support from government and local stakeholders, however, several of these difficulties are being overcome.

Having noted some of the difficulties in implementing co-management in Clayoquot, it is important to note that has been mostly a positive and constructive experience, for Nuu-chah-nulth in particular, but also for the non-native communities in the area. The CRB represents an unprecedented level of control for Nuu-chah-nulth over their territories vis-à-vis the provincial government. By having 'a say' in the form of sharing authority over all resource and land use decisions, Nuu-chah-nulth on the CRB are included as empowered partners in co-managing the resources of Clayoquot Sound. In this sense, participation on the CRB asserts the Nuu-chah-nulth voice, protects their rights and values, and incorporates their traditional ecological knowledge in activities that take place on their traditional territory. Moreover, because it includes local non-aboriginal stakeholders as decision makers, the CRB is an institution that provides a

substantial increase in broad-based local control over local resources to Clayoquot Sound. By involving both local non-aboriginal and Nuu-chah-nulth representatives in shared resource management, the CRB has facilitated the development of cooperative relationships between competing users. Building such constructive relationships is accomplished largely by focusing on consensus decision-making, providing a forum to air grievances, and mediating disputes between stakeholders at the local level (Goetze 1998).

PART 3: Lessons Learned

3.1 Benefits of Co-Management

Co-management can provide a number of benefits for both local stakeholders and governments. Although co-management does not alone represent the solution to the growing crisis in resource (mis)management in many industrialized and developing countries, it can offer significant benefits for local communities and indigenous peoples trying to protect natural resources or assert their rights within the state system.

A. Improved resource management

The overall benefit of co-management for all stakeholders, both national and local, is an improvement in how resources are managed. Since "the fundamental reason for cooperation is that both sides realize they need each other in order to protect resources they both value" (Osherenko 1988:103), the outcome of averting or resolving a crisis in those valued resources through co-managing is advantageous for all parties involved. Often, simply reducing the level of conflict and competition between users over a resource has positive results (Cassidy and Dale 1988). In this sense, the most significant and immediate benefit of co-management noted in the research is more effective, sustainable and efficient resource management and enforcement (Osherenko 1988; Dale 1989; Pinkerton 1989; Weiner 1991; Usher 1993; RCAP 1996; Christie et al. 2000; Berkes et al. 2001).

Governments particularly appreciate this because involving local resource users in management creates a greater likelihood of compliance. Decisions in which those who use and work with the resource have input are perceived by users as being more sound, and certainly more legitimate, than decisions made by bureaucrats in distant cities or state managers who are present in an area only occasionally (Feit 1989; Pinkerton and Weinstein 1995; Brosius et al. 1998; Goetze 1998; Spak 2002). The coordination of use, planning, research and allocation that co-management typically

introduces significantly improves the health of a resource base through enhancement, rehabilitation, protection, conservation or any number of cooperative strategies that promote sustainability in the management of the resource(s). Done correctly, co-management can prove more economically expedient by providing government with a means to coordinate among jurisdictions, and allowing more efficient management of multiple resources and multiple objectives. Moreover, as many have argued, it is undeniable that "willing cooperation is less expensive than enforced compliance; practical management depends on cooperation" (Weiner 1991:6).

B. Increased input from local stakeholders

For local users, the most important benefit is that co-management arrangements can provide them with increased control over resources and their use. Membership on a joint management board gives them an opportunity to participate directly - albeit with different degrees of authority - in the sustainable management of the local resource(s) upon which they depend. Through representation on a co-management board, users have a forum in which they can get more respect and a better hearing of their observations, concerns and grievances. In some cases, governments are bound by board decisions and are answerable to the board in the decisions it makes that might affect local resources.

C. Improved information gathering and dissemination

Governments now have access to the extensive knowledge of local users who are continually aware of changes in the health of the resource(s). Co-management can in this way "dramatically increase education and information to users of all kinds [and] improve the quality and content of research" (Osherenko 1988:97). In the most effective co-management systems, the indigenous/ traditional local and state management systems are integrated and complement one another:

"Co-management creates the potential for some healthy synergy between the kinds of knowledge held by the two solitudes by enabling the use of detailed local knowledge accumulated through a long series of observations over many generations. Such 'diachronic' data can be of great value and can complement 'synchronic' data – snapshots over large areas – on which science is based" (Berkes 1994:20).

Such boards also provide a means for information sharing among users regarding the state of the resource, and allow users to identify common objectives and develop mutually beneficial strategies for meeting these goals. In Canada, this is particularly noticeable between indigenous and non-indigenous stakeholders. Education through participation in a teamwork-oriented process of decision-making not only can increase the level of knowledge among users of different cultures, but also can foster greater respect between individuals and communities involved in co-management.

D. Improved and sustainable conflict management

Co-management can reduce conflict between local users and state managers, thereby increasing the acceptability of sustainable use initiatives and reducing the cost of enforcement. Co-management boards provide governments with a venue for consultation with local users, which gives state managers access to a sounding board for government initiatives and an arena for dealing with crises in an orderly manner. In this way, government can avoid the political and economic costs of social protest by environmentalists, First Nations and/or local non-native users. This in turn creates an atmosphere of cooperation between government and users that can reduce the risk of a future crisis in the resource base as a result of unmediated competition and conflict over resource use. As Pinkerton observed among fisheries co-management regimes in Canada:

"Co-management arrangements…often…allow allocation decisions to be made internally by fishermen: conflict and competition is confined to an arena where fishermen feel assured they can be heard. Compelled to resolve their differences internally, fishermen must produce equitable criteria for allocating harvesting rights, which will be acceptable to their peers. The process is thus perceived as just and legitimate, and the decision receives greater support all around than do comparable decisions under conventional government management" (1989:20).

Relationships between stakeholders often in competition over a resource can be improved dramatically by working cooperatively.

E. Integration of traditional local knowledge

Under co-management, management plans and decisions are made not only with local/indigenous peoples as active participants, ideally as equal partners, but also on the premise that their perspective is useful, if not necessary. In many cases, the long-term, specific local indigenous knowledge and the management strategies based upon it are partnered successfully with the more generalized, short-term scientific approach in assessing resource situations and planning for the future. Coordinated management efforts thus can enhance and perpetuate the indigenous cultural system. Self-reliance can be enhanced significantly under co-management agreements that often include provisions for indigenous employment, training, access to capital, protection of the subsistence resource base and various economic development opportunities.

F. Increased local control

Increased local/indigenous control and participation is achieved by sharing power with indigenous peoples in decisions concerning resource use, access, management and development. While this often begins with limited management functions, it may

expand to greater influence in policy formulation. Through co-management, local stakeholders can be involved directly in the practical management of resources and a bottom-up approach that through regular communication with local communities creates a sense of 'ownership', which further facilitates the joint management process (Osherenko 1988:21). Within power-sharing structures, indigenous interests and values can be represented more effectively. Since governments in Canada do not require the explicit definition of rights or any legal transfer of jurisdiction, they have been willing to negotiate co-management agreements with relatively little delay. As pragmatic initiatives for shared resource management, co-management arrangements can provide First Nations with the opportunity to exercise more power and to improve their economic, cultural and social circumstances immediately. Ideally, co-management provokes not only a shift in decision-making power, but also a transformation in the criteria by which First Nations formulate resource management policy. In this sense, state managers are no longer solely informed by state interests; they must now consider the principles, interests, objectives and needs of the local parties to a legal agreement.

G. Forwarding indigenous aspirations within the state system

The mechanisms mentioned above serve to increase local control and participation. While not the explicit recognition of the indigenous right to self-determination, they are a step forward. As participants in decision-making processes, indigenous peoples may influence the pace and form of development as "economic and environmental goals would be mediated by political and administrative means" (Cassidy and Dale 1988:31). Indigenous peoples are in greater command of their lands and are no longer objects of an administrative process, but active subjects directing it as it applies to some of their key interests. Acting from within the processes once monopolized by government, indigenous peoples have greater leverage and opportunity to assert their claims against the state. For instance, for the Cree of Northern Quebec, "co-management is a

building block…to the realization of Cree goals of increased self-determination and cultural autonomy" (Berkes et al. 1991:23).

Co-management also allows governments to observe that sharing power with indigenous peoples does not result in disaster, does not negatively affect the state's credibility and does not compromise national security. The state's reasons for refusing to share power with indigenous peoples as partners are thus challenged, while the legitimacy of indigenous peoples' claims to determinative authority through self-government is enhanced. As such, co-management may act as a 'confidence-building measure' for promoting significant systemic change in that it facilitates long-term, partnership-oriented relations between indigenous people and the state (Goetze 1998 and 2002).

In sum, engaging in cooperative decision-making in resource management creates a framework for management that is "more appropriate, efficient, and equitable management on several counts" (Pinkerton 1989:23) and can prove advantageous for local users and governments alike, while providing the means to advancing several key indigenous aspirations within the liberal-democratic state system.

3.2 Limitations of Co-Management

Despite the many benefits of co-management, it is also subject to a number of limitations and potential problems, which can be experienced by boards in general, and local users, governments and indigenous participants in particular.

A. Lack of decision-making authority for local co-managers

Many well-known examples of co-management do not give local participants equal power. As noted in Part Two, Cree co-managers have been regularly frustrated with the limited decision-making powers of the Coordinating Committee under the JBNQA.

The Beverly-Kaminuriak Caribou Management Board, while often heralded as a model for other co-management systems, is limited to "develop and make recommendations to the appropriate governments and to groups of traditional caribou users" (Osherenko 1988:17). In other words, it has a strictly advisory role, with no real participation in the decision-making process (Spak 2002). The government can and does choose to ignore the Board's recommendations if they do not coincide with government interests (Usher 1993). Hoekema (1995) highlights similar problems with the Nunavut Wildlife Management Board, which is limited in that the ultimate responsibility for wildlife management remains with the government and the minister must review and accept all decisions before they are implemented.

The main failing of these, and indeed of most, co-management systems is their attempt to involve local stakeholders in resource management without sharing power. Co-management boards with only advisory functions are inherently limited because they cannot challenge the government's management authority and consequent control of local resources. Advisory status allows local co-managers only the ability *to influence* the process of resource management decision-making. As such, board recommendations are incorporated at the government's discretion. This means that the role of local stakeholders becomes purely *consultative*, so they are not afforded any involvement in the *actual* decision-making process, which remains the sole jurisdiction of the state.

In addition, unless boards have some form of leverage against state management agencies, there may easily be a problem of insufficient political or bureaucratic will to enforce those board recommendations that government has accepted. In sum, with advisory boards there is a danger that if the bureaucracies oppose plans persistently, they "have it their way easily" and board members will find themselves relegated to expending much of their energy trying to secure bureaucratic consent (Hoekema 1995:185).

B. Government resistance to sharing power with local co-managers

Gilmour and Fisher (1991) note that shifting from centralized control over management and planning to decentralized cooperative management necessarily involves an accompanying shift in perception and methodology; this shift must occur not only in local communities but also in bureaucracy and government. When this shift does not occur, there may be problems with implementation, enforcement and integration of local or traditional knowledge. Inflexible adherence to either personal or political agendas, knowledge systems or management strategies fosters protectionism rather than compromise, and this would likely lead to the disintegration of the cooperative framework.

Even with boards that have greater authority and the ability to constrain state agencies should they behave in a cavalier manner towards the board, governments often continue to act in an adversarial manner or display a decided lack of commitment to developing the new partnerships that co-management requires. Thus, a major problem facing all co-management boards is that governments are likely to "jealously guard their authority against encroachment by other [decision-makers], and they are not in the habit of sharing power with those they have authority to regulate" (Osherenko 1988:103).

C. Difficulties with building partnerships

Continual reiteration of past conflicts or historical injustices can alienate board members who are meant to be fostering an atmosphere of mutual support and developing a foundation of common interest that facilitates cross-cultural cooperation. Ivanitz describes as the 'myth' of co-management the assumption that a convergence of interests and compromise can be attained easily:

"Unless clearly defined…the term 'partnership' becomes nothing more than an esoteric concept…The greatest challenge for resource management is,

therefore, reconciling extremely diverse interests and conflicting demands. The resulting management system is often tenuous and fragile, unless entrenched in a legislatively endorsed agreement of one form or another" (1996:137).

However, even if legislatively entrenched, divisions within communities regarding the acceptable scale of development or inter-departmental conflict within government can lead to the breakdown of co-management. Moreover, the fact that government retains the capacity to overturn the board's decisions, even if it never comes to bear, perpetuates state control over resource use and development. This can easily provoke resentment among local co-managers, particularly indigenous participants with political claims to autonomy within traditional territories.

Should co-management seek to bring aboriginal peoples into the process of allocation, use and management, it also may present problems for local non-aboriginal users. Without a substantial surplus in a resource base, an extreme rarity in the current climate of overexploitation and extreme competition, increasing indigenous shares to resources can only be achieved by reducing the current or past extraction levels of other users. Introducing a new group of indigenous users may result in non-indigenous job loss and increased pressure on the resource base, angering both local workers and environmentalists. Admittedly, this is a rarity, as most aboriginal peoples already are engaged in a certain degree of subsistence resource extraction. Problems typically begin when agreements involve introducing aboriginal use of the resource(s) for commercial purposes (Goetze 1998). This, along with the introduction of different aboriginal priorities into a shared management system, may lead to resentment among local non-aboriginal users.

D. Risk of co-optation

A danger for local stakeholders to consider is the possibility that co-management boards, which operate under the ultimate authority of a government minister, may function in such a manner as to maintain the state's interests despite local involvement in decision-making. It is possible, then, that simply negotiating and participating in co-management may not address local peoples' concerns and objectives. In this sense, co-management systems may not effectively serve to incorporate elements of local/indigenous interest or concern, much less result in a shift toward locally controlled management of local resources. In fact, the risk is that "on the contrary, they are much more likely to result in the continuation of the state management system in a decentralized but largely unchanged form" (Usher 1986:73).

The *state system itself* also has the potential to compromise the co-management process, so that local co-managers become and remain entangled in a process of attempting to negotiate compromise and resolve conflicts through a structure and according to an agenda designed by the state to meet its management process needs (Spak 2002). In this scenario, by the very act of participation, local co-managers unwittingly "risk being co-opted into pursuing government management objectives rather than the building, strengthening and extending of [local] social solidarity" (Kearney 1989:99). Similar problems exist when scientific knowledge dominates the decision-making process; allowing local-level 'traditional' knowledge to escape consideration in deference to the 'expertise' of 'scientific' knowledge can cause local co-managers to lose their "co-equal status" in co-management "because government managers will always have more scientific expertise available to them" (Berkes 1989:198).

E. Increase in governance complexity and costs

Problems for government include the possibility that, in the short-term, co-management arrangements may increase management conflicts between users who may have a

history of antagonism between them, and/or divergent worldviews regarding resource management. This results in delays in decision-making as a result of public protests, legal action or foot-dragging at the board level. The added level of decision-making often necessitates the addition of government employees to deal with these local-level management structures. In turn, management costs usually increase, as the bureaucracy must expand to cope with a new level of decision-making and the greater number of parties involved in formulating policy. Bureaucratic expansion carries with it the risk of duplication, conflict with national resource management policies, and administrative and jurisdictional fragmentation. These delays and added complexities can cause resource-related industry to leave the area in favour of other, less complicated locations, in turn affecting the regional, and possibly national, economy.

F. Difficulties integrating traditional ecological knowledge

Local/indigenous participants may also experience problems with government's failure to implement recommendations when based primarily on the traditional ecological knowledge (TEK). For instance, for many aboriginal co-managers in Canada, the challenge is to negotiate the "often proprietorial, indeed paternalistic, attitudes of resource 'managers' both in and out of government, among them scientists who consider the scientific management of these resources as part of their mandate and responsibility" (Berkes et al. 1991:17). Thus, in many cases, decisions are made according to existing state paradigms of resource management and continue to be dominated by technocratic discourse, which rejects TEK as lacking in the rigor espoused by the scientific method (Baines 1989; Nakashima 1991; Usher 1993). As such, TEK often is not considered a legitimate form of knowledge useful in developing resource management strategies (Spak 2002). This failure to capitalize on the expertise of local/indigenous users then leaves local co-managers seriously disadvantaged in the process, with the result that alienation is perpetuated and local participation becomes little more than tokenism.

G. Problems of representation

Co-management systems may experience difficulties with representation. At the board level, it is sometimes difficult to recruit local/indigenous representatives with the skills, interests or time to contend with the bureaucracy of sharing decision-making with state managers (Feit 1989; Goetze 1998). When they are available, additional problems may be present. Absenteeism can result in decisions being taken which may not be in accord with certain stakeholders whose representative did not attend the meeting. When co-managers are present, cultural or personal discomfort may inhibit them from speaking and therefore fully participating in the decision-making process. The location of meetings may be an inconvenient and/or costly distance from representatives' homes. State-sanctioned structures for making decisions by Robert's Rules or similar voting procedures are often alien to local/indigenous resource users and co-opt local representatives within what are often culturally foreign structures.

Co-management bodies also may fail to fully integrate the views of local stakeholders in other ways. While certainly useful for the sake of continuity in building new cooperative relationships, extended service as a representative on the board may foster the emergence of an elite circle of local representatives; this further alienates other local community stakeholders from the process of resource management decision-making (Hoekema 1995). If board members are not available to hear the issues and concerns of the people they represent, usually through open meetings or community gatherings, this may lead to resentment in the broader community of interest. Lack of funding for community consultations, or the failure to integrate typically marginalized groups such as women and youth is similarly problematic (Notzke 1994). Finally, in many co-management agreements, various stakeholders will be excluded, either by design or by circumstance. In many cases, industry, developers, environmental groups and recreational users with an interest in the resource(s) being co-managed are not included in board representation, although mechanisms may be provided in the agreement for the communication of their interests and concern to the board. That being so, these stakeholders typically have formed powerful political

lobbies, which provide them with an alternate means to influencing resource management policy and decisions (Rusnak 1997).

H. Increased pressure on human and natural resources

Above all, it should be remembered that the act of devolving authority to include local and indigenous users in resource management decision-making does not co-management make; *sharing power and responsibility for managing local resources involves continual negotiation of interests and a willingness to make concessions from all parties*. The implementation of co-management can place a considerable strain on human resources as the increase of responsibilities that comes with taking on management activities is added to local participants' daily regime of employment and family responsibilities. As such, participant 'burn-out' or dwindling interest in the process is an ever-present risk.

Moreover, should the agreement involve the addition of new users, use activities or allocation systems, co-management may create added pressure on the very natural resource(s) over which all are concerned. Therefore, there is no ultimate assurance that establishing a co-management board will result in improved resource management or reduced levels of conflict and competition between users.

3.3 Conditions for Successful Co-Management

The conclusions that have been drawn as to the issues which are important to ensuring effective and successful co-management are of particular interest in reviewing the literature from this perspective (see, for example, Usher 1986; M'Gonigle 1988; Osherenko 1988; Feit 1989; Pinkerton 1989; Berkes et al. 1991; Wiener 1991; Usher 1993; Binder & Hanbidge 1994; Wavey 1994; Hoekema 1995; Pinkerton & Weinstein 1995; Goetze 1998; Christie et al. 2000; Berkes et al. 2001). The most important elements include:

- *Determinative participation of local users in resource decision-making*. This is by far one of the most important elements of building a successful co-management system. Governments must be willing to devolve sufficient decision-making power to local co-managers in order that the decisions of the board are binding to some degree. As noted above, boards that are granted merely consultative or advisory status in the decision-making process often fail because their decisions are too easily ignored or dismissed by the state, leading to the persistence of conflict and/or crisis. It is critical, then, that local stakeholders be included as equal partners in managing the resource in a form of delegated authority or power-sharing arrangement that amounts to a substantive degree of local community control over of the resource base (see the discussion on power-sharing in Part One for further details on how this has been accomplished). Furthermore, given the risk of state co-optation via co-management, a reality that would only serve to further weaken local authority and management systems, it is critically important that co-management agreements assure that local co-managers will enjoy "participation with equal authority, legal standing, resources, and respect" (Feit 1988:48).

- Provisions that provide *leverage for local/indigenous co-managers* vis-à-vis the state's authority. Any government disregard or reversal of board decisions should be subject to public scrutiny. It is best if board decisions are legally binding so that acceptance and implementation of decisions are not left to the goodwill of bureaucrats or government ministers because this constitutes a "very weak base for the constitution of a new partnership" (Hoekema 1995:190). However, given state reluctance to devolve such authority, there should be at the very least a measure of leverage in the form of public review of instances of government failure to implement or enforce board decisions.

- The development of *management structures and processes that promote compromise* in shared management. In this sense, there must be a forum and process for decision-making that facilitates the negotiation for a middle ground

regarding potentially contentious issues among a large number of stakeholders whose relationships may have been characterized by competition. In terms of reaching decisions cooperatively, consensus-based decision-making seems to promote compromise most effectively.

- Stakeholder participants must *moderate personal, political, economic and social agendas* sufficiently to allow collective decisions that consider the interests of the broader communities to be reached. This is key to the success of building partnership-based relationships that are the basis of the cooperative process.

- A *forum for internal problem-solving and dispute resolution* between co-managers in which contentious issues may be addressed before they erupt into public hostilities, or cause the cooperative process to break down. Dispute resolution processes are particularly important in addressing conflicts between state and local/indigenous participants that could potentially lead to the dissolution of the agreement. Additionally, an appeal mechanism should be in place for cases in which decisions of the co-management board meet with public dissatisfaction or protest.

- The *integration of local/indigenous ecological knowledge* and management systems into the management process. This is meant both to preserve traditional lifestyles and to assert indigenous values, interests and perceptions regarding the resource, but also to improve the management of the resource and promote the convergence of state and local interests and strategies.

- The presence of *detailed procedural and structural guidelines* in which the resources are specified, accountability mechanisms are outlined, and roles and responsibilities of participants are clearly defined. These provisions also should set out clear mechanisms for enforcement, monitoring and evaluation. It is important that the language and intentions of agreements be unambiguous because

"inconsistency and lack of clarity can contribute to cultural tension, reluctant and withheld communication, lack of trust, and even economic costs" (Manzie 1994:67).

- A means of *transparency and communication* between users, representatives and state managers about the decision-making and management process. Local communities should be involved in the process as much as possible via sub-committees, open board meetings and/or regular community gatherings in which feedback may be heard.

- The model upon which the system of co-management operates must be shared or negotiated to ensure that *all participants' worldviews are reflected* in a "shared paradigm" of resource management (Usher 1993:117). This includes the style of decision-making, language and terminology used and the basic structure of the management board.

- A *sense of security* for local/indigenous participants both in terms of guaranteed funding and clear, legal guarantees regarding tenure over land and resources. Levels and duration of funding should be noted as part of the legal provisions of the agreement. Similarly, the geographic scope of management authority should be clearly defined.

- Co-management provisions, structures and processes must reflect a *consideration for local variability*, including community politics, the nature of the resource(s) being managed, local economic realities and cultural differences. In other words, there is no single model that may be applied to the various contexts within which co-management is to be established.

- Agreements involving indigenous participants must include procedural requirements that promote the *serious consideration of the indigenous perspective*. This is particularly crucial in instances where state managers and indigenous participants come into conflict over issues that involve aboriginal rights. Veto power

for indigenous participants serves this purpose well. Beyond this, steps should be taken to avoid such confrontational situations by promoting consensus-based decision-making as an alternative if not preferred means of making decisions.

In addition, co-management agreements are more likely to operate successfully when they are *formal and multi-year*, and when serious efforts are made to ensure the *continuity of participant representation and support staff,* which allows boards to operate more effectively and more efficiently. Resources should be managed comprehensively where necessary and possible, to avoid strategy conflict or redundancy. Regimes also should provide arenas for discussion in order that non-signatories and community members have a means of contributing to board discussions and management issues.

While this list is not an exhaustive account of provisions that contribute to successful co-management, it represents a comprehensive summary of those most commonly raised in the literature, and those noted during my own research on co-management in Clayoquot Sound. As discussed in Part Two, which assesses the Clayoquot co-management experience, some of these elements can be observed in the operations of the Central Region Board. This undoubtedly accounts for its continuing success in cooperatively managing Clayoquot resources at the local level after over 8 years in operation.

Conclusion: Learning from Others

Many regions in the world are experiencing rapidly depleting resource bases and the resulting conflict between stakeholders over their use and management. This has become a major concern politically, economically and socially in a variety of national contexts in both developed and developing areas. As was the case in Canada three decades ago, in developing areas a trend has emerged towards developing community-based resource management to ensure the continuing health of diminishing resources, such as fragile marine ecosystems or threatened species of wildlife. This promising development, however, also involves negotiating the challenges involved in building co-management models that promote participatory and cooperative relationships and minimize conflict, while at the same time promoting economic development. There is a pressing need to build cooperative management institutions with local stakeholders in order to sustainably manage resources, reduce conflict, coordinate management and conservation strategies, and capitalize on the rich knowledge and long-term experience of local users.

As with aboriginal communities in Canada, in developing areas, local communities rely heavily on their natural resources for both subsistence and commercial purposes. Furthermore, both local and state stakeholders regard resources as crucial to their current and future economic well-being. In both situations, increasing pressure on ecosystems is endangering the future viability of the very resources that are valued for their potential in economic development. Finally, the situation for building co-management in these regions is similarly complicated by lack of government support for increasing local community control over the management of natural resources. This is often accompanied by a concern that the process of devolution is not easily accomplished because local stakeholders do not have the capacity to take on management roles. The risk of government co-optation, therefore, is present also in developing contexts.

While worthy of close consideration, these challenges are not insurmountable. As the Canadian experience illustrates, co-management is a process of constant negotiation, particularly where local stakeholders seek augmented levels of power. Yet it is greater local authority that ultimately creates more effective co-management. The purpose of this report and its most effective application is, first, to inform communities in developing areas of the basic ideas about and functions of co-management. Second, it serves to highlight co-management's potential utility and pitfalls based on detailed case studies of long-standing joint management regimes. Finally, by documenting the conditions that contribute to successful co-management, it emphasizes the provisions and arrangements that best serve the interests of local partners, particularly in terms of empowering them vis-à-vis the management authority of the state. Ultimately, this report aims to provide local communities with the knowledge to *guide their strategies* in negotiating co-management systems with governments in order to effectively meet the resource-based needs of local stakeholders over the long-term.

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