Criteria and Indicators of Joint Forest Management

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- Prayer
- Introductions

OVERVIEW

Intro to Co-management: quick review of the definition of co-management, how it is being applied in Canada, and some of its successes and failures to date

FII Project Overview: introduce the project, the research questions and the objectives this project addressed, and describe the research outcomes

Research Findings: In this portion of the presentation, we will focus in on two of our major research products. **I** will discuss the essential elements of co-management practice identified from analysis of the theoretical co-management literature and existing cases. I'll identify what we consider to be the key things needed to make co-management work. Next, **Melanie** will talk about important co-management outcomes identified from local archival information. Ron will share his and Renel's experiences working to complete this analysis.

Then there will be some time for questions and discussion.

What is co-management?

- **Co-management:**
  - involves two or more parties with interests and values related to joint resources
  - guarantees fair sharing of management responsibilities and benefits for a given area or set of natural resources
  - involves genuine power-sharing among partners, processes for joint decision-making, and a system of reciprocal rights and obligations

- I wanted to begin my talk by providing a quick overview of co-management
- Co-management is also known as joint management, shared resource management, participatory management, collaborative management or multi-party management
- The term co-management refers to a broad spectrum of arrangements that involve different levels of power-sharing, from informing (where the community is informed about decisions already made) to partnership (involving joint decision-making)
- Most co-management regimes share the following features:
  - They cover a specific geographic area or set of natural resources
  - involve two or more parties with interests and values related to joint resources
  - guarantee fair sharing of management responsibilities and benefits
  - involve genuine power-sharing among partners, procedures and processes for joint decision-making, and a system of reciprocal rights and obligations

Co-management Applications

- Aboriginal-government partnerships are most common

- co-management can also involve non-Aboriginal resource users, non-governmental organizations, and industry

- there are both formal and informal agreements

- Co-management focus:
  - regional/geographic
  - species specific
  - many species
  - open access

•Various co-management arrangements have emerged over the past 2 decades in Canada

•Because of legal and constitutional requirements as well as comprehensive land claims settlements, First Nations and government have developed an array of co-management agreements involving fish, wildlife, parks and protected areas, and, less commonly, forestry

•However, co-management can also involve non-Aboriginal local resource users, ngo's, and industry, as in the case of the West Coast salmon fishery or Saskatchewan forestry

•Co-management is arising from both formal and informal agreements

• some arrangements have a regional geographic focus (Gwaii Haans Agreement), while others target particular species (Porcupine Caribou Management Board)

•some co-management targets multiple species (Inuvialuit Wildlife Management Advisory Committee), while others apply to open access situations as in the case of fisheries or rangelands

Co-management Applications

- Co-management has met with mixed success

- Benefits include:
  - improved resource management functions
  - improved communication and understanding
  - effective dispute resolution

- Results are variable due to the existence of differing values, knowledge, beliefs, and ways of working together

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- Co-management arrangements have met with mixed success depending on their structure, operations, and membership, as well as the severity of tests they've been subjected to

- In some cases, co-management has improved resource management in ecologically, culturally, and economically sustainable ways

- Co-management has improved communication and understanding between Aboriginal and non-Aboriginal groups and has functioned as an effective dispute resolution mechanism

- Results are variable however, and in many cases, beneficial and lasting partnerships are difficult to achieve

- Too often differing knowledge, values, ways of working, and belief systems prevent co-management success

- Currently, it is unknown if the co-management model is viable and what the prospects are for realizing its goals of power-sharing, integration of knowledge and values, fairness, local relevance, and long-term sustainability

- Co-management is really a social and institutional experiment that needs to be supported, evaluated, and improved by people like us – academics, communities, policy-makers, and resource managers

Criteria and Indicators of Joint Forest Management

- **Sponsor**: Forestry Innovation Investment (FII), Forest Research Program
- **Timeline:** January 2003 – March 2003
- **Goal:** explore criteria and indicators of co-management using the theoretical literature, empirical case studies, and Tl'azt'en/UNBC archival information
- **Future Direction:** Phase 1 of a 3-year project

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- Our research was sponsored by Forestry Innovation Investment (FII) and was conducted between December 2002 and March 2003

- This research was designed as a multi-year project, although we need to reapply for funding each year.

- There is increased global demand for environmentally and socially responsible forestry practices in BC; public and private sectors need to demonstrate accountability to both international markets and local communities; many international initiatives and certification standards require the meaningful involvement of First Nations in forest management.

- However, developing balanced, collaborative partnerships among First Nations, government, and/or industry has been challenging. Although in many cases, understanding and respect have increased, the challenge remains to develop sustainable forest management arrangements with First Nations that improve stewardship and the acceptability of BC forest products and practices.

- The overarching goal of the research is to develop a criteria and indicators framework to direct, monitor, and evaluate co-management on the JPRF and, in doing so, to provide an adaptive approach to develop and assess forest management partnerships in other regions.

- Our major goal in this first of three research phases was to explore the essential elements of co-management through the theoretical literature and empirical case studies, as well as Tl'azt'en archival information.

- We developed a preliminary set of criteria and indicators (C&I) to direct, monitor, and evaluate the implementation of a joint management on the JPRF.

- In year two we hope to work with the JPRF board, members of Tl'azt'en Nation and UNBC, and other local/regional JPRF stakeholders to identify the essential elements of the JPRF co-management process and outcomes from a local perspective, and to evaluate aspects of the partnership based on our findings.

Definitions

- **Criteria:** essential elements

- **Indicators:** signs and signals

- **Co-management Process:** structure and operation of partnership

- **Co-management Outcomes:** the results or benefits of partnership

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• Before I go any further, I would like to define a few terms that will be used frequently during this presentation

•*Criteria* are the essential elements needed to achieve some objective. In this case, the critical factors needed to ensure co-management is successful.

•*Indicators* are the signs and signals used to monitor and assess criteria.

•Our research focused on two main topics co-management *processes* and co-management *outcomes*.

•The term, joint management **process** refers to the structure and operation of partnership including membership and roles, funding and administrative support, communication, community participation, integrating Aboriginal and Western knowledge, decision-making, and conflict resolution.

•Joint management **outcomes** refer to the results or benefits of partnership such as employment, economic opportunities, educational opportunities, joint research, access to local knowledge, increased collaboration, and increased local involvement in forest management

Research Questions

- What are the essential elements of effective co-management systems identified by previous research?

- How has co-management been monitored and assessed?

Our work examined the following research questions:

- What are the essential elements of effective co-management systems identified by previous research?
  - **criteria** for co-management process and outcomes
  - national/international - literature, case studies
  - local - Tl'azt'en/UNBC archival information
- How have joint forest management processes and outcomes been monitored and assessed?
  - **indicators** of co-management process and outcomes
  - national/international - literature, case studies
  - local - Tl'azt'en/UNBC archival information

The research was designed to meet the following year-one objectives from a three-year research plan:

1. identify gaps in knowledge and provide necessary background to the multi-year research;

2. identify criteria and indicators of joint forest management *processes* and *outcomes*;

- 3. generate a set of general recommendations to guide joint forest management partnerships;

- 4. 5.develop preliminary methodology for future research; and,

- 6.raise awareness of the research project and return results to the involved communities.

Research Outcomes

1. Annotated bibliography
2. Bibliography
3. Resource library
4. Technical report on criteria for co-management success
5. Confidential technical report on local C&I of sustainable forest management
6. Journal article
7. Community newsletter
8. Training
9. Employment
10. Preliminary list of interviewees
11. Preliminary list of interview guidelines
12. Case studies
13. Web posting

Outcomes and products of the initial research phase include:

•1.   an annotated bibliography of key joint forest management references;

•2.   a comprehensive bibliography of joint forest management resources based on library, archival and internet searches;

•3.   a 'library' of joint forest management literature for UNBC and Tl'azt'en Nation;

•4.   a technical report on the essential elements of joint forest management process identified from the theoretical literature and empirical case studies;

•5.   training for Tl'azt'en researchers in joint forest management concepts and data analysis techniques;

•6.   employment of three Tl'azt'en researchers in the analysis of local materials to identify Tl'azt'en criteria for joint forest management process and outcomes;

•7.   a confidential technical report on Tl'azt'en criteria and indicators of sustainable forest management;

•8.   a scholarly publication concerning local level criteria and indicators of joint forest management process and outcomes;

•9.   a community newsletter describing the research project and results;

•10. two joint forest management case studies on the Waswanipi Cree Model Forest and joint ventures/co-management in the NorSask Forest Management License Area;

•11. a preliminary list of experts from Tl'azt'en Nation, UNBC, and local stakeholders who will be approached about participating in subsequent research stages;

•12. preliminary interview guidelines to provide direction to future research; and,

•a website posting of research products.

Criteria for Co-management Success

- **framework identifying the essential elements of co-management can be used to:**
  - direct future research on the JPRF
  - enable comparison of the literature and research findings
  - facilitate preliminary assessment of the strengths and weaknesses of the JPRF
  - assist implementation of JPRF management strategies
  - promote an effective Tl'azt'en Nation/UNBC management partnership
  - provide a tool to direct and monitor partnerships in other regions of BC

- To contribute to co-management efforts on the JPRF, I attempted to describe the essential elements of co-management practice documented by previous research

- I analysed information from both the theoretical literature on co-management and empirical evidence from existing cases

- I identified nine key criteria for co-management success

- I suggest this framework can be used for several purposes:
  - Direct future research
  - Compare the theory or co-management to its practice on the JPRF
  - Facilitate preliminary assessment of the strengths and weaknesses of the JPRF
  - Assist implementation of JPRF management strategies and contribute to forest certification and sustainable forest management planning
  - promote effective working relationships among Tl'azt'en Nation/UNBC management partners
  - Provide a tool to direct and monitor partnerships in other regions of the province

Methods

- **information locations**
  - local, regional, national libraries
  - Internet searches
  - personal communication
  - Tl'azt'en Nation resource management library and archives
- **topics**
- **information sources**

•Information came from a variety of places

•Sources were identified using electronic databases, electronic journals, and library catalogues at U of A, UBC, UNBC, CNC, U Vic, Simon Fraser, University of Conneticut, University of Minnesota

•These sources were retrieved in person, electronically, and using interlibrary loans

•Relevant web sites were searched such as NAFA, AFN, and CFS

•Articles were acquired from researchers and practitioners involved in co-management and community-based management

•Locally relevant sources were accessed through Tl'azt'en Nation libraries and archives

•Our analysis covered topics such as national and international co-management, community forestry, joint ventures in forest management, community participation, local and traditional knowledge, communication, shared decision-making, resource management institutions, partnership building and sustainable forestry

•Data came from published and unpublished materials such as theses, research reports, journal articles, working and position papers, books, conference proceedings

•Sources focused on the co-management of forests but also included information on co-management of fisheries, wildlife, water, protected areas, and rangelands

Criteria for Co-management Success

- **Nine criteria themes** were identified
  - institutional structure
  - planned process
  - decision-making
  - capacity
  - representatives
  - communication
  - community support
  - partnership building
  - knowledge systems

- Nine criteria themes were identified

  institutional structure; planned process; decision-making; capacity; representatives; communication; community support; partnership building; knowledge systems

- We recognize that some overlap exists between these topics so each criteria is broken down into several sub-themes or more specific criteria

- This is not a comprehensive list but reflect those conditions which we feel, based on this and previous research, are of fundamental importance to the success of forest co-management on the JPRF and in British Columbia in general

- We view co-management as a dynamic and evolving process

- The major criteria for co-management success is often considered to be the degree of power-sharing among partners.

- However, from our perspective, any framework designed to direct and evaluate co-management should consider not only power-sharing but the wide variety of other criteria known to contribute to effective co-management

- Using this approach, even incomplete co-management can be evaluated as a functioning process

- Thus, regimes such as the JPRF will fulfill some of the criteria for success and will likely improve over time given periodic monitoring, evaluation, and change in response to local conditions

Institutional Structure

- formation and formality
- board size
- interactive organizations
- mandate
- appropriate management scale
- membership
- management approach
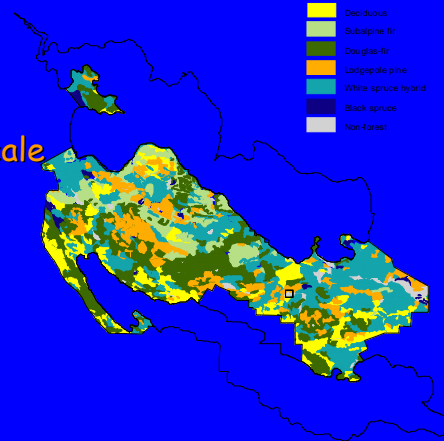
•Awareness of the reasons co-management regimes form and the formality of their structures is important – research suggests that co-management formed proactively, in the absence of resource crises is more effective and that formal regimes provide a greater degree of protection for the process, incentive and commitment for partners, and clearly defined costs and benefits

•Although the size of a co-management board depends mainly on the number of interest in the resource being managed, research shows that smaller co-management groups operate more effectively and efficiently than larger ones – three common features of success include a limited membership, restricted involvement of government bureaucracy, and a local/regional mandate

•Co-ordination and co-operation among organizations involved in co-management is critical

•A co-management regime must define its roles and its limitations – a clear mandate should be developed and formally articulated at the outset of a process – this entails determining the types of management tasks that a group can and wants to undertake at the regional or local level

•The scale of co-management should be appropriate to an area's ecology, people, and management context – this involves both the physical size of the co-management area and the number of members included in the management organization

•All co-management partners must have authority to participate in the co-management process and membership should be clearly defined – members must be able to contribute knowledge, skills, and financial resources to co-management and must be held accountable for agreed-upon responsibilities

•Co-management is most likely to succeed if it involves an ecosystem management approach, protection of local cultures, enhancement of cross-cultural understanding, an adaptive/learning-oriented approach, a proactive approach, and a people-centered/co-operative approach

Decision-Making

- meaningful transfer of power
- sense of ownership
- consensus
- conflict resolution
- incorporation of traditional systems
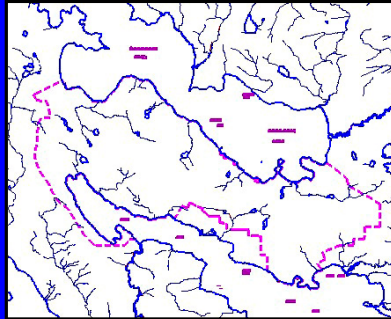
•A significant degree of power-sharing among co-management partners is essential. Co-management requires that management functions are owned and controlled by the involved partners and communities.

•Co-management partners must actively and continuously participate in planning, decision-making, implementation, and evaluation. This ensures the necessary sense of ownership and commitment to the process develops.

•Research shows that consensus decision-making and informed agreement are essential to long term success of co-management. Consensus means all co-management members agree to a course of action after consideration of alternatives and consultation with their communities.

•A co-management group must use conflict resolution techniques to reach decisions and must promote compromise and consideration of alternatives.

•Traditional approaches to leadership can make important contributions to the design and operation of co-management. Co-management groups should consider traditional approaches to decision-making, representation, resource access and allocation, and partnership building.

Capacity

- effective facilitation
- administrative support
- funding
- external support

•Research shows that co-management requires **facilitators** who can advance working relationships among partners, and between the co-management regime, communities, and other resource management agencies – where there are power imbalances, conflicts, communication problems, or diverse cultural backgrounds, the services of a skilled facilitator are often needed

•A co-management group requires **administrative support**, individuals such as an executive director, treasurer or secretary to sustain group performance, promote communication and community outreach, create process credibility, and maintain a prominent group profile

•Effective co-management requires timely, sufficient, and sustained **funding**

•**External support** from sources such as ngo's, academic or research institutions, donors, government agencies, or interest groups is often needed to facilitate co-management – partnership brings resources such as money, information, volunteers, advocacy – this is important since any group cannot hope to have the full range of talent, skills, and resources needed for co-management

Knowledge Systems

- blending science and traditional knowledge
- access to information
- research
- local involvement
- education and training

- Traditional knowledge and science must both be recognized as legitimate sources of knowledge, practices, beliefs, and values AND both must be used as an integral part of decision-making.

- Although many co-management regimes recognize the inherent and practical value of accepting and incorporating both systems into co-management, integration is difficult for reasons related to acceptance, understanding, and implementation challenges.

- How co-management partners share information is a measure of their level of trust. Research suggests that as little information as possible should be treated as restricted within a co-management system. Co-management should facilitate access to information by all partners - this may be subject to specific confidentiality or intellectual property considerations.

- Co-management decisions need to be based upon high quality data. Collaboration among co-management partners to conduct research, analyze and interpret it, and store information from both systems is critical. Researchers have found that co-management is most successful when co-management partners share responsibilities for research.

- Experience shows that one of the best ways to ensure that traditional and local knowledge are incorporated into co-management is by directly involving the people who hold the knowledge. For example, small inter-cultural teams such as focus groups, working groups, and advisory committees could be used to address co-management issues.

- Co-management groups need to bring education and training opportunities to board members, resource users, and involved communities. For instance, providing training on the land, staff exchanges, job shadowing programs, or discussion panels. Training to increase cross-cultural understanding is also key. On-the-job training for community members is also a way to share learning opportunities with involved communities and to improve their perceptions of the benefits and accessibility of co-management. For instance training could be provided in areas such as heavy machinery operation, tourism outfitting, small business development, or traditional knowledge research.
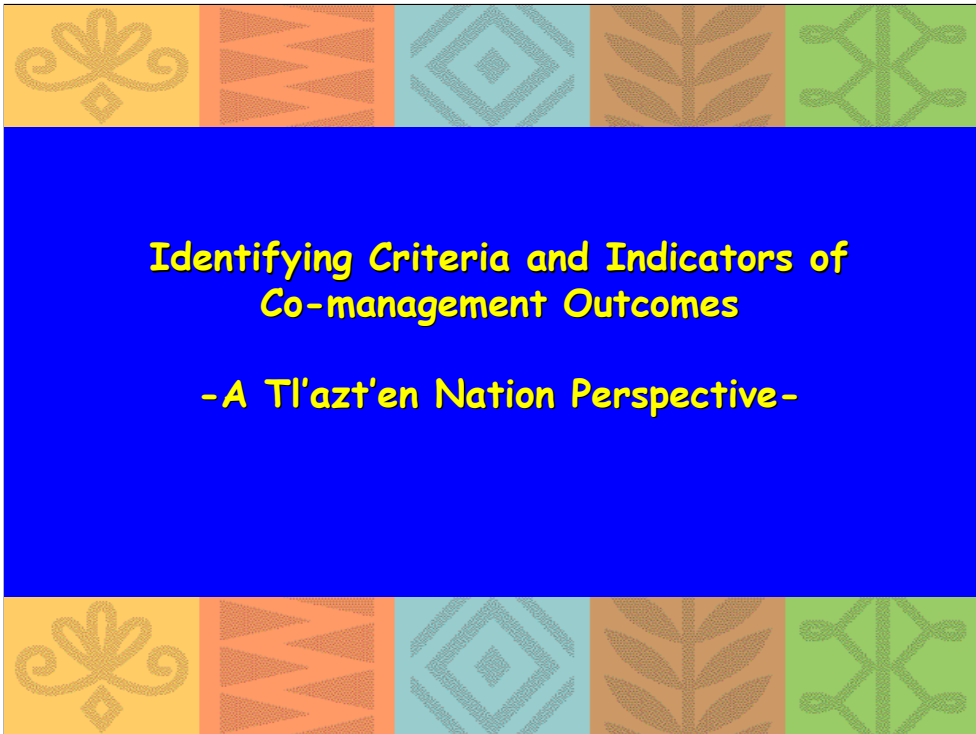
Identifying Criteria and Indicators of Co-management Outcomes

-A Tl'azt'en Nation Perspective-

- Identify outcomes that Tl'azt'en community members might like to see from the JPRF

- Organize this information into criteria to guide and evaluate the outcomes of the partnership

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Methods

- Modified AFPP (Aboriginal Forest Planning Process) approach
  - Developed for the JPRF
  - AFPP Guidebook
  - Many applications
- Information sources from archives
  - Elders Interviews
  - FRBC Project Interviews
  - ("Echo" Project Interviews)
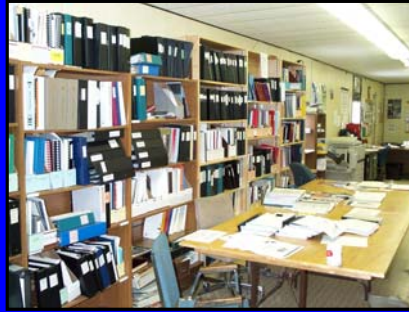
The AFPP was developed for the John Prince Research Forest four years ago as a way to incorporate the community's values into the management of the forest. It focuses on using interviews and other information that already exists in the community to identify criteria and indicators.

Over the last two years, Erin, Steve Dewhurst and myself wrote an AFPP Guidebook that we will be distributing all over the province. The approach is being used for Tanizul's Sustainable forest management plan. A researcher with the Caribou Tribal Council used it for a Traditional Ecological Knowledge project

Three sources were used to identify co-management outcomes.

The Elders Interviews were completed by members of Tl'azt'en Nation in the 1970s and 80s. The Elders spoke about life on the land, traditional knowledge, and told stories and legends.

The FRBC interviews were from a project that ran from 1997 to 1999 and was lead by Annie Booth. The subject of the interviews included experiences with Tanizul, and land development in the traditional territory.

The Echo project interviews focused on the JPRF and looked at how community members thought the research forest should be managed.

Training in transcript analysis was provided in January by Erin and Melanie

Sue, Beverly, Renel, Ron, Terry attended

Provided background on secondary research: information types, preparing information, evaluating information

Introduced a framework of criteria themes and sub-themes developed from previous research

Practiced analysis using sample information from Tl'azt'en archives; information structuring and recording

Analysis

- Analysis by Renel and Ron over February and March

Renel and Ron worked together on information preparation and analysis from February until mid-March in the Treaty Office in Tache

Criteria Themes for Co-management Outcomes

1. Community – Tl'azt'en
2. Capacity building
3. Economy
4. Cultural revival & maintenance
5. Sustainability
6. Management practices and stewardship
7. Management effectiveness

Theme #1: Community – Tl'azt'en Nation

- Quality of life & lifestyle improvements
  - services, facilities, active lifestyles
- Internal relationships
  - intergenerational (between Elders and youth)
- Well-being
  - unity, working toward common goals
- Self-reliance and independence
  - skills, economic

Quality of life: Elders want wood for their stoves

There's too many roads that has spoiled our people (too easy just to drive); [getting Hydro] was the beginning of getting spoiled…people began to forget about doing dry meat and things like that; Life became easy [with electricity and running water] and people began to get lazy

They wanted to improve this community, arena and stuff for the kids, ball fields; Children should have a safe play area, recreation facilities, good culture and traditional learning centres;

Theme #2: Capacity-building

- Post-secondary education and training
  - natural resource professionals, forestry, accessibility, for employment
- Traditional education
  - role of Elders, cultural knowledge, teaching methods, seasonal cycles

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Theme #3: Economy

- Local economic development
  - Equitable opportunities, incentives, positive & negative impacts
- Subsistence/bush economy
  - Hunting, trapping, fishing, & medicinal plant species, species used for technology/materials, seasonal cycles
- Employment
  - Hiring policies/employment protocols, for Tl'azt'en members, for other groups, local (close by)

Theme #4:
Cultural revival & maintenance

- Cultural land ethic
  - worldview, rules for respecting the land and others
- Harvest technology
  - tools for living off the land and how they are used
- Traditional harvesting practices
  - wood gathering, hunting
- Traditional knowledge
  - How animals and plants were used

- Wholistic management
  - balance of different values

Theme #6:
Management practices and stewardship

- Knowledge of systems
  - Habitat requirements
- Management practices
  - Acceptable practices, flexible practices
- Enhanced/improved condition of resources/reduced degradation
  - Herbicide impacts, timber harvesting impacts, fishery, wildlife
- Protection of resources
  - Riparian (creeks, lakes, wetlands), trails, keyohs
- Compensation

Theme #7: Management effectiveness

- Improved allocation of resources
  - sustained economic and employment opportunities
- Improved policies and practices
  - herbicides