'NANWAKOLA: CO-MANAGEMENT AND Sustainable Community

Economic Development in a BC Fishing Village

by

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Abstract

After more than a decade of discussing the meaning of the term sustainable development, researchers have begun to turn their attention to the question "How can sustainable development actually be implemented?" The answer is both general and context specific. Basic principles have been identified that must be followed if development is to be sustainable. The strategies employed to put these principles into action, however, are dependent on places and people in diverse circumstances.

One such circumstance is that of the fishing-dependent community. In British Columbia resource depletion and job loss have brought the question of sustainable development in fishing communities to the forefront of the minds of academics, governments, fishermen and communities alike. Research results demonstrate that one strategy essential for sustainability in this setting is fisheries co-management. Co-management alone, however, will not result in community sustainability. Diversification efforts, within a framework of sustainable community economic development (SCED), are required.

The case of Alert Bay, British Columbia supports literature review findings that while co-management and SCED are important strategies for sustainable development, neither is easy to achieve. Efforts to date in this remote fishing village illustrate not only the potential for co-management as a strategy for SCED and sustainable fisheries management, but also the challenges. These challenges are both internal (local) and external to the community. At a local level building social cohesion, improving skills, education and planning processes, creating organizational capacity and mechanisms for financing are critical steps to meeting

the potential of SCED and fisheries co-management. Increased cooperation from senior governments is also required.

A framework for evaluating the degree to which communities such as Alert Bay are pursuing sustainable development through CED and fisheries management, and the barriers and opportunities they face, has been developed during the course of this research. The framework was demonstrated to be generally applicable for use in Alert Bay, with some modifications to methodology and framework components. With further development research suggests that this framework can provide a useful tool for communities, governments and others seeking to facilitate sustainability in fishing dependent communities.

In our language we have a word - 'N̲anwak̲ola - it means "putting the minds together". We must not leave this room until we reach consensus.... whether we fight or not, we hash it out, we reach consensus (N2).

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LIST OF ACRONYMS AND ABBREVIATIONS

Organizations

CIEDS Cormorant Island Economic Development Society

DFO Department of Fisheries and Oceans (Government of Canada)

EDC/ABEDC Alert Bay Economic Development Commission

ICNRC Inner Coast Natural Resource Centre

KTFC Kwakiutl Territorial Fisheries Commission

MoELP BC Ministry of Environment, Lands and Parks

MoF BC Ministry of Forests

MTTC Musgamagw Tsawataineuk Tribal Council

NB/UFAWU Native Brotherhood/United Fisherman and Allied Workers' Union

Centre for Displaced Fisheries Workers

NFN/'Namgis 'Namgis First Nation

NIFC North Island Fisheries Centre

TAB Tourism Alert Bay

U'Mista U'Mista Cultural Centre

VAB/Village Village of Alert Bay

Whe-La-La-U Whe-La-La-U Area Council

Other

CED Community economic development

NIDA Nimpkish Integrated Development Approach

SCED Sustainable community economic development

CHAPTER ONE

Introduction

1.1 Research Purpose

The purpose of this research is to examine if and how a fishing-dependent community can utilize fisheries co-management as one element of an overall sustainable community economic development strategy. Out of this central research objective three sequential research questions emerge:

1) How are the terms sustainable development, community economic development (CED) and fisheries co-management, and the relationships between these concepts, defined in the literature;

2) Linking the conceptual approaches of sustainable community economic development (SCED) and fisheries co-management to their practical application, what strategies, principles, process steps and conditions for success or failure in fisheries co-management and sustainable CED are identified in the literature; and

3) How applicable are these relationships, strategies, principles, process steps and conditions to a case study British Columbia fishing community (Alert Bay)?

1.2 Study Context: Crisis in BC Fishing Communities

While the fishing industry represents less than one percent of total employment in British Columbia (Statistics Canada, 1996), along the province's primarily non-metropolitan coastline its importance rises significantly. Some communities rely almost exclusively on the fishing and public sectors for income and employment, while others are more diversified.

Within the fishing sector, harvesting and processing of Pacific salmon has historically provided the majority of employment. In fact, many of BC's fishing-dependent communities, including Alert Bay, were founded to support the harvest and processing of the rich and plentiful salmon resource (Sinclair, 1971). For centuries before European settlement the salmon supported First Nations communities all along BC's coast and river systems. Today, ties to the fishery among coastal peoples run much deeper than jobs and incomes — however important these economic aspects might be. Salmon remain an important component of the ecological, economic, social and cultural fabric of these communities.

The mid-1980s marked the beginning of a difficult decade for the BC fishery and those that depend on it. Prices and revenues in the salmon fishery began to fall. By 1996, Gislason et al. (1996; 4.3) wrote "in inflation-adjusted terms, salmon prices today are less than half of what they were in 1988." Prices declined as world supply increased, the result of record returns of wild fish to Alaskan waters and a growing aquaculture industry in Norway, Chile, Scotland and BC. Even BC processors had turned to importing salmon from Alaska as a source of supply. While prices fell in the late 1980s and early 1990s, returns of many BC salmon stocks were also declining. Poor ocean survival rates, over-harvesting, habitat destruction, and management cutbacks were among the factors to blame. Particularly harmful to the fishing economy were declines of the valuable Fraser River sockeye, as well as Chinook and Coho. Strict conservation measures were put in place to protect these stocks in the mid-1990s, including closures and reductions in fishing times (Gallaugher and Vodden, 1999; Gislason et al., 1996).

Then, in 1996, fishing communities were hit with what was considered an economic disaster. It had been expected that the season would be poor. Matters got worse, however, on March 29th, when the federal Department of Fisheries and Oceans announced the Pacific Salmon Revitalization Strategy. Known by the people of BC as "the Mifflin Plan" after the fisheries Minister of the day, the Plan aimed to conserve resources, increase economic viability within the fishing fleet, and share responsibility for resource development and management with stakeholders. It was to accomplish this primarily through a 50% reduction in the size of the salmon fleet. A number of specific measures were taken, including: a) an $80 million voluntary retirement or "buyback" program; b) a requirement to choose a single gear type and fishing area for each vessel (area licensing was introduced as a component of the strategy); c) a provision for buying additional licenses to allow vessels to fish with multiple gear-types or more than one area (known as "license stacking"); d) license fee increases to be phased in over two years; and e) the option not to fish in 1996 while retaining one's license.

From 1995 to 1996 coast-wide employment related to the salmon fishery in BC declined by over 30%, from 26,010 to 17,990 (DFO, 1998). Of the estimated 8,020 jobs lost, many had disappeared permanently as a result of the fleet reduction policy (Gislason et al., 1996). Others were associated with low salmon catches. Although it was expected that the stocks would rebound in the future, salmon catches had hit levels lower than any since the late 1950s.

Thousands of jobs had been lost in BC's coastal communities, yet many questioned whether the federal Plan would achieve its objectives. Further, communities were angry that they had not been consulted about the need for, or the design of, such a policy, and that the impacts on

BC coastal communities had not been adequately considered. Nor had the fleet reduction plan been coupled with an adjustment and transition program. It was not until 1998 that a $400 million restructuring and adjustment program was finally announced by the federal government. Job losses in the fishery were compounded by further declines in the forest and public sectors. BC coastal communities were declared to be in a state of crisis.

It is in this context, in the midst of a dramatic need for alternative approaches that would ensure the survival of both coastal communities and the fisheries resource, that this research project was launched.

1.3 Basic Approach of the Study

The researcher has employed a case study method, applying a framework for sustainable

community economic development (SCED) and fisheries co-management to a single case study community. The research framework was developed through a literature review conducted in the first phase of the study. The research is primarily qualitative and is descriptive, interpretive, and explanatory. Exploratory studies are particularly appropriate when a good theory does not exist (Yin, 1989). The theory of CED is described as weak by some, non-existent by others. Case studies have been the primary form of research. The same can be said of fisheries co-management. The study, therefore, is also of an exploratory nature.

By delving into the economic, environmental and social issues of one particular settlement it has been possible to gain a more thorough understanding of the development processes taking place than could be offered by an extensive survey or even a greater number of case studies. The study does not aim to be representative but only to seek insights that may be applicable to other communities and to test the generalizations made in the bodies of literature relating to SCED and fisheries co-management for their applicability in this particular setting (a BC fishing community).

The research framework consists of "checklists" of strategies, principles, process steps and conditions for success. The approach of measuring community processes against a checklist of criteria developed from the literature is not unique. Bryant (1999), for example, uses a similar checklist approach to evaluate CED processes. In fisheries co-management, Pinkerton (1995) has developed checklists of principles and success factors. This study takes into account and builds further on the work of Bryant, Pinkerton and others.

1.4 Significance of the Study

The study "'Nanwakola: Co-management and Sustainable Community Economic Development in a BC Fishing Village" was designed to provide results of theoretical and practical significance. This practical orientation, Mitchell (1989) and Hare (1974) suggest, is necessary for geographers interested in processes dominated by politicians, policy makers and even ordinary citizens among whom "the concrete is preferred to the abstract, the simple to the complex, and the immediate to the ultimate glory ..." (Hare, 1974; 26).

The research is unique because it examines the interface of sustainable development, CED and fisheries co-management. As demonstrated by the research findings, these three fields of study are intimately related. Too often they are viewed in isolation. As a result, the relationship between community involvement in resource management, or co-management, and SCED has received little attention in the literature. The study helps to fill this gap. Further, BC fishing communities are poorly represented within the case study materials on CED in Canada.

From an academic perspective, the development of a framework for assessing a community's progress toward sustainable CED is also significant. The framework, consisting of guiding principles, strategies, process steps, and conditions for success in SCED, has been developed and tested during the course of this research, along with a subset of principles and conditions that apply specifically to fisheries-related activities. Through the case study this framework has been tested for both for its applicability in this particular setting and for its overall usefulness/ease of application. As a single case study, the research is a springboard for further enquiry.

From a practical perspective, the study is intended to be of benefit to the case study community, other resource communities, SCED and co-management practitioners, and government agencies responsible for resource management and community development. The research provides, for example, socio-economic information and analysis pertaining to one BC fishing community; data which should be, but seldom is, collected for all fishing communities and utilized by fisheries managers (Poetschke, 1983; Sinclair, 1971). Further, while the study is case-specific, insights gained are likely to have applicability to other communities, particularly those with similar characteristics (e.g. rural, resource-dependent, significant First Nations population). The opportunities and challenges faced in Alert Bay are both unique and shared with other

coastal and resource-based local economies.

Findings are especially relevant for the 50 some communities in the province active in the fishing industry (Gislason et al., 1996). Fishing communities once reliant on British Columbia's thriving salmon fishery are facing a period of unprecedented change. The restructuring process is a painful one. Feelings of disempowerment and uncertainty about the future of families and communities with strong historical and cultural ties to their geographical home, and to th fisheries resource, abound along the BC coast. Documen4ing the case of Alert Bay, where potentially viable solutions for both 4hese communities"and thE fisheries they depend upon have been proposed, may help other BC fishine communities going through this period of adjustment.

Finally, a number of spEcific recommendations foz CED practitioners withén the case study area `rise from this work. Some are included in this document, others uill be present%d directly to participating orgaNizations and relevant aoencies. By attempting to bridge the gap between the ideils of the litercture and the practical implementation of those ideals, it is hoped that in the end some valuable insights have been gained; insights that will help communities and fisjeries managers,(in BC and elsewhere, move in thm direc4ion of sustainability.

1.5 Thesis Outline

This research has two major components: sustainable CED (SCED) and fisheries co-management. Within each component strategies, principles, process steps, and conditions for success have been identified, comprising an overall framework for SCED in general, and for fisheries co-management as one specific SCED strategy of particular relevance to fishing communities. A description of the research framework, developed through a literature review, is provided in Chapter Three.

The case study community within which this research framework was tested is Alert Bay, BC, an island settlement of approximately 1,267 residents (Statistics Canada, 1996). Alert Bay is considered to be both fishery dependent and heavily impacted by recent job losses in the British Columbia salmon fishery (Gislason et al., 1996). Further examination of the social, economic and environmental well-being of this community has confirmed that, indeed, this is a community in need of alternative development approaches. Another key reason Alert Bay was selected was that Alert Bay organizations had expressed and demonstrated a commitment to the ideals of SCED and co-management. This characteristic made it an appropriate location for studying the methods and challenges of putting such ideals into action. Reasons for employing a case study approach, criteria for case study selection, and details regarding research methodology are discussed further in Chapter Two - Methodology.

Chapter Four provides an introduction to the various CED and resource management initiatives that are underway in Alert Bay. These activities are described by sector and CED strategy. The degree to which the process of development and adjustment taking place in Alert Bay abides by the theoretical principles of, and recommended implementation process for, SCED is also discussed. Finally, utilizing information on conditions for success or failure, insight into why the principles and process steps for SCED are (or are not) followed is sought.

Results pertaining to the specific SCED strategy of fisheries co-management are presented in Chapter Five. Finally, an overall evaluation of the development process underway in the case study community and of the research framework itself is provided in Chapter Six, along with a discussion on the importance of co-management as part of the community's overall SCED efforts. A comparison of the relationship between these two concepts (SCED and co-management) described in the literature and the case study situation is made. Recommendations for further research are also provided.

CHAPTER TWO

Research Methodology

2.1 Literature Review and Development of the Research Framework

The first stage of the research, and the basis for comparison of the case study to a theoretically ideal process of SCED within this setting, consisted of a review of pertinent literature within three main fields: sustainable development, community economic development, and fisheries co-management. Secondary bodies of literature from which information has been drawn include public participation in community and resource planning, resource management and resource-dependence/regional development. Based on this review a series of checklists, including: strategies, principles, recommended process steps and "conditions for success" for SCED, sustainable fisheries and co-management, were developed (see Appendix 1). In recognition that compliance with broad, qualitative principles would be difficult to determine and a dangerously subjective task, a more specific set of criteria on which to base judgement was developed. These criteria, once again, came from the applicable body of literature. A list of "guiding questions" for determining if SCED, sustainable fisheries and co-management principles are

being followed was devised based on these criteria (see Appendix 2). These checklists and guiding questions formed the research framework (the basis for case study evaluation). See Figure 1.

In addition to forming the research framework, the literature review was critical in clarifying the definitions of key terms (e.g. resource-dependence, CED, sustainable development) and helping the researcher to understand the micro and macro level circumstances faced by fishing communities in BC (the context for fisheries-based development in Alert Bay). Perhaps most importantly, the review provided insight into the relationships and similarities between the approaches of sustainable development, community economic development, and fisheries co-management as described in the literature. The literature review demonstrates significant overlap between these complementary areas of study (see Chapter Three).

Figure 1 Research framework

2.2 Case Study Research Design

> (T)he need for case studies arises out of the desire to understand complex social phenomena...the case study allows an investigation to retain the holistic and meaningful characteristics of real-life events.
>
> Yin, 1989; 14

A case study research design should include: research questions; propositions/assumptions that guide decisions about the unit of analysis and relevant data to collect; a defined unit of analysis; a method of linking data to the propositions; and criteria for interpreting the findings (Yin, 1989). Each of these components has been included in the design of this research.

The propositions/assumptions that have guided decisions about relevant data to collect, and helped to link those data back to the propositions, are those concepts embodied in the checklists or research framework (see above). The unit of analysis is discussed below (Selecting and Defining the Case Study). The time scale is primarily current (1996-99), with historical information being used as context and as a method of providing further insight into long-term development programs. Historical context regarding the community's development from the times of pre-European settlement to the 1980s has been described in a companion document to this thesis, Cormorant Island Community Profile (Vodden, 1999). Finally, criteria for interpreting findings (determining if a "yes", "no" or "to some degree" response to a checklist item is warranted) have been established. See below (Analysis) for a description of how data have been interpreted.

The researcher has addressed the requirements of research validity and reliability through the use of several techniques. For example, multiple sources of evidence have been used and corroboration sought (see Data Collection below). Further, findings were reviewed with both academic advisors and informants from the case study community. This step has served as a test of bias or subjectivity and also as a confirmation that described patterns, relationships etc. were accurate and clearly demonstrated.

Yin (1989) suggests that theory is the level at which generalization may occur and that external validity can be sought even in a single case study. In analytic generalization previously developed theory is used as a template with which to compare case study results. If it concurs with previous case study work replication may be claimed. This is the approach used in this case study. Finally, to ensure reliability, the researcher has attempted to follow a clear and consistent methodology, outlined below, throughout the data collection and analysis phases of the research. However, some flexibility in the methodology (e.g. questions asked, nature of the interview) was required due to the nature of the study and the participating individuals and organizations.

2.3. Case Study Selection

The community chosen for the case study aspect of this research was Alert Bay (Figure 2). Alert Bay is located on Cormorant Island in British Columbia's central coastal region.

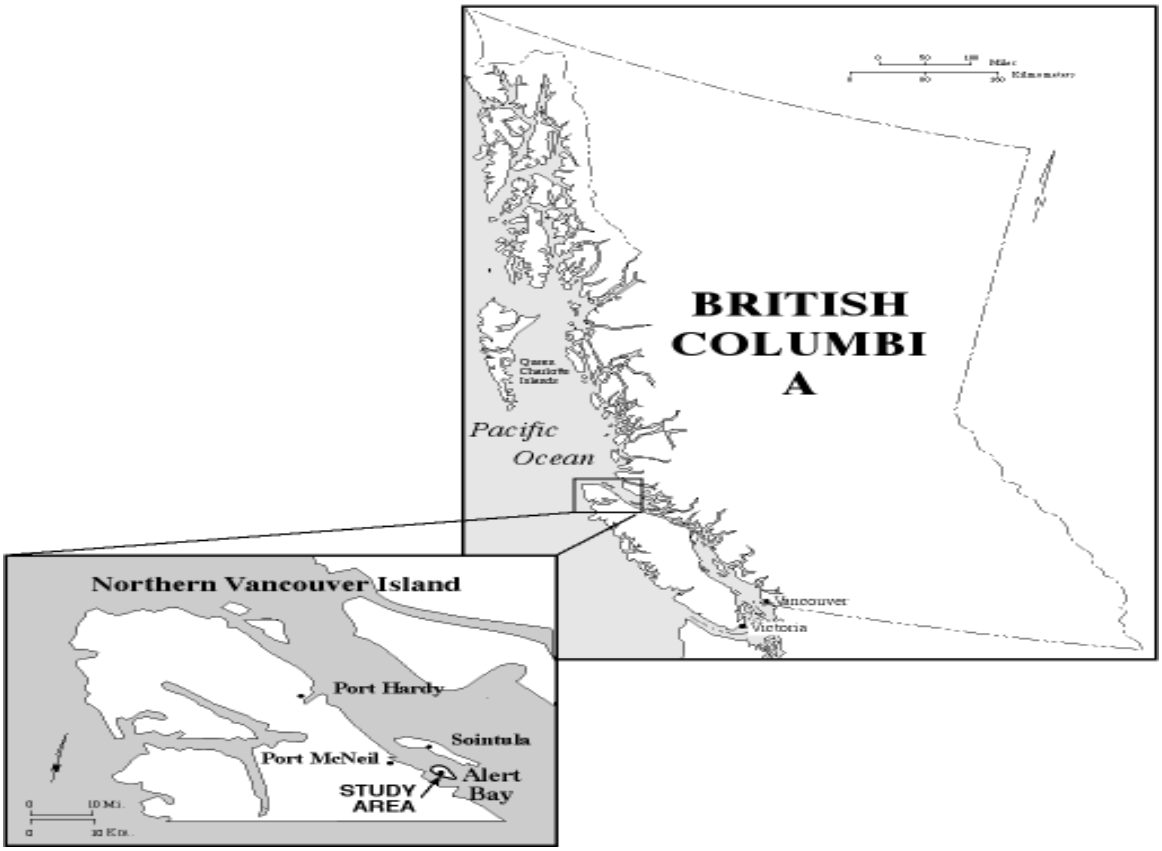

Figure 2 Location of Cormorant Island

Criteria for community selection included: 1) degree of fisheries dependence; 2) evidence of a sustainable CED approach to community development with a fisheries co-management component; 3) size; and 4) accessibility. Alert Bay clearly satisfies all of these criteria:

1) Fishing has traditionally played a central role in the Alert Bay economy. Today, as a result of restructuring in the salmon fishery, Alert Bay is considered to be a fishing-dependent community in "crisis" (von Specht, 1996). A provincially commissioned study (Gislason et al., 1996) lists Alert Bay as one of the 15 communities most severely impacted by recent events, reporting a loss of 63 jobs in the area representing 11% of total community employment and 28% of employment in the salmon industry. Based on these figures, prior to 1996, the community relied on the salmon fishery for 39% of community employment. Even after the job losses of 1996 the salmon fishery represented 32% of employment. Still other Alert Bay fishermen fish for species other than salmon. Further, many local businesses are dependent on dollars generated in the fishery. Based on this information, the community of Alert Bay appeared to fit the definition of a "fishing-dependent community" (see Chapter Three for a definition of resource-dependence and Vodden, 1999 for more on fishing dependence in Alert Bay).

2) Organizations and governments in Alert Bay have demonstrated an interest and active involvement in sustainable community economic development and fisheries co-management. For example, in June 1996 the Village put an economic development strategy that clearly states a commitment to the goals of sustainable development and co-management of local resources into place. It states:

> Our vision is to become a community of healthy, happy individuals who are sustained by the resources of our adjacent environment and who are active in the process which works to sustain that environment. We endorse the British Columbia Round Table on the Environment and Economy's definition of sustainable development...To achieve the above vision of ourselves as a community in balance with our environment, we must create a situation where we can become responsible for and have the right to harvest, process, manufacture and sell products created from the resources of the land and marine base. Our strategy stems from a vision of co-management and co-ownership...

The 'Namgis First Nation, based in Alert Bay, also has a historical involvement in CED. Wismer and Pell (1981) cite the Nimpkish Integrated Development Approach as an exemplar Canadian CED program. Further, several First Nations governments and organizations operating in Alert Bay have been actively involved in fisheries co-management. The Kwakiutl Territorial Fisheries Commission, for example, has conducted stream and stock assessments and trained a workforce of Aboriginal Fisheries Guardians. The 'Namgis First Nation operates its own salmon enhancement program.

3) The size of Alert Bay, in terms of population, is appropriate given the researcher's desire to conduct an in-depth analysis. A ratio of one investigator to 2,000 people or less is recommended for intensive community studies using conventional methods (Mendras and Mihailescu, 1982). Alert Bay consists of a municipality of 612 people, an unincorporated area occupied by six to eight individuals, an area of Crown land set aside for approximately 190 First Nations residents, and two reserves on which an additional 465 people reside (Statistics Canada, 1996). Taking Census undercount into account Alert Bay's population is estimated to be between 1,300 and 1,350 residents.

4) Finally, considerations of information access and funding made Alert Bay the ideal choice, despite a relatively isolated geographic location. Working in the community since June 1996, the researcher had the opportunity to observe both the community and the development processes taking place within it. The result was not only improved access to data for use in this research, through previously established relationships, but increased knowledge of the community which was used in developing an appropriate research framework and methodology. The financial costs of conducting the research were also reduced as costs of travel and accommodation were covered, in large part, by local organizations.

Additional advantages associated with investigating an island community were anticipated. There appeared from initial observation to be a certain cohesiveness and strength of identity associated with Alert Bay's island location, due in part to their geographic isolation. Extended families and strong kinship ties add to social cohesiveness, which is recognized as a factor in CED success. Further, an island forms a clear geographical boundary to "community".

It was also recognized, however, that there were challenges associated with the case study community chosen. The community is made up of a complex cultural and political milieu, a result of its development history; a history that includes a number of distinct First Nations who originally inhabited the area and the subsequent arrival of European settlers. The events of the past 200 years are very much a part of the situation that exists today. Although it is the current period with which this study is concerned, the researcher has made an attempt to recognize the impacts of these historic events in so far as they explain current realities and/or are relevant to the manner in which the research should be appropriately conducted. For example, the Ethical Guidelines for Research put forth by the Royal Commission on Aboriginal Peoples as well as those of the 'Namgis First Nation have been recognized and followed. The complex nature of the community has also meant that: a) attempts to achieve cross-cultural understanding were important to data collection and analysis; and b) the timeline, number of organizations and amount of information to be collected was more extensive than what is likely to have been required in another case study

community, using a similar methodology. The implications of this community history for the definition of "community" are discussed below.

2.4 Defining the Community of Alert Bay

On Cormorant Island there is a municipality, two reserves belonging to the ‘Namgis First Nation, an area of Crown land called Whe-La-La-U (home to members of Kwakwaka'wakw bands other than the 'Namgis), and a small unincorporated area (Sandyville). While Bryant (1999) points out that municipalities are important as representations of geographic community because of their increasing role in managing and planning their spaces, the same can be said of the role of First Nations both on reserves and in their larger territories. The whole of Cormorant Island consists of less than six square miles of land. In total, 600 acres lie within the reserve lands of the ‘Namgis First Nation.

In Alert Bay the broader community, defined as all those who live on Cormorant Island, appears to be more relevant than the "community" defined as those living within municipal boundaries, or of the reserves. There is regular social interaction between Island residents, regardless of the jurisdiction in which they live. Speck (1987; 65) describes: "A visitor walking down Alert Bay’s main road on a summer day would encounter groups of women — from both ends of the island — talking and laughing as they push their baby carriages along. On the piers, fishermen, Indian and White, dressed identically … work on their nets, drink beer, and carry on a friendly banter." The municipal population includes a significant number of people of Kwakwaka'wakw descent, who are connected with the activities and development processes of First Nation governments and organizations located outside of the municipal boundaries. Many community, and even cultural, events are attended by residents of all backgrounds. Services and infrastructure such as stores, moorage, postal services, and fire response are shared. Also shared is the history and experience of life on Cormorant Island.

However, it must also be recognized that the administrative and political systems of a municipality are quite distinct from that of Band, Area and Tribal Councils. Relationships with, and powers granted by, provincial and federal governments also vary; a distinction that is highly relevant to the question of community economic development and fisheries management. Related to this is the issue of Aboriginal title and ongoing treaty negotiations, which are distinct to First Nations of the Island.

Resident perception is yet another justification for identifying distinct communities within that of Cormorant Island as a whole. While to a large extent it appears that residents of Cormorant Island identify themselves as members of the larger community of Alert Bay, some residents clearly make a distinction between two communities on the Island: "Indian" and "White", reserve and non-reserve (Speck, 1987). Others differentiate between the ‘Namgis reserve and Whe-La-La-U. The 'Namgis First Nation operates an independent school (T'lisalagi'lakw), although non-Native children can, and do, also attend, and there are two health care facilities on the Island. Division between the two communities in the past can be seen in documentation of the ‘Namgis Health Centre's beginnings. The Centre opened in 1983 after a long and bitter battle over the death of an 11 year old girl who was misdiagnosed and inadequate health care generally for Native people living on the Island (Speck, 1987). For some there are very real political, social and cultural boundaries between the communities that co-exist on Cormorant Island.

For all of these reasons, at the outset, the researcher has made a distinction between the municipality of Alert Bay, ‘Namgis reserve/First Nation and Whe-La-La-U as communities of their own right. At the same time, in recognition of their inter-relatedness, the overall case study area was

defined from the onset of the research as the broader community of Cormorant Island, marked physically and geographically by the Island's shorelines. Within the case being examined (Cormorant Island) several sub-units are identified. The case study, therefore, is an "embedded single case" (Yin, 1989); the sub-units being organizations (U’Mista Cultural Society, Kwakiutl Territorial Fisheries Commission etc.) and communities of interest, culture (First Nations and non-First Nations) or jurisdiction (Village of Alert Bay, ‘Namgis reserve, and Whe-La-La-U) within the community as a whole.

Although this embedded case study definition of the Alert Bay community was used for the purposes of research design, based on initial research and observations, it was recognized that "community" should ultimately be defined by the residents of Cormorant Island themselves. Thus, during the course of the research interview respondents were asked how they define their community (See Appendix 3 - Interview Schedule). This question was also important in reaching a shared understanding of terminology between the interviewer and respondent.

Research results confirmed that residents of Cormorant Island define community in many different ways, ranging from jurisdictional definitions (‘Namgis Reserve, Whe-La-La-U and Village of Alert Bay) to the Island community as a whole and broader communities of culture or interest such as the BC fishing industry, "Natives in general" or the Kwakwaka’wakw peoples. In total, 9 of 19 respondents (47%) to Question 2.1 defined their primary community as the whole of Cormorant Island (Alert Bay). Several respondents felt a primary sense of responsibility and belonging to one specific sub-unit and a secondary sense of responsibility to the whole of Cormorant Island or some

otherwise defined community. It should be noted, however, that because most respondents were organizational representatives, responses to these questions were likely to be biased toward their respective organizations/jurisdictions. Village of Alert Bay representatives and residents not representing any particular organization were more likely to define their community as the whole of Cormorant Island than 'Namgis representatives or other representatives of First Nations organizations. Additional details about the interview process are provided below.

2.5 Community Contact

Contact with the case study community was established prior to the study (Spring 1996) through the researcher's role as a CED Facilitator working on a CED project (the Inner Coast Natural Resource Centre) on behalf of the Village of Alert Bay Economic Development Commission. Initial information about development initiatives taking place in Alert Bay, and the organizations and governments leading those initiatives was gathered through participant observation in 1996. This information was valuable in designing the research and, in particular, in identifying individuals and organizations that should be included in the study.

Once identified, those organizations were sent formal requests for: a) an opportunity to discuss the planned research; and b) permission to conduct the research, including the collection of information regarding their government/organization's CED and fisheries management initiatives. Three additional organizations were invited to participate in the study as their presence or importance became known. In total eleven organizations were approached and agreed to participate. (See Vodden (1999) for a full description of each of the participating organizations and their CED/resource management initiatives).

In seeking their support and involvement, a letter and Summary of Proposed Research were sent to each organization in the summer and fall of 1997, along with an offer from the researcher to make a formal presentation. In most cases letters of permission and support were received after follow-up phone calls. In the case of the 'Namgis First Nation an agreement entitled "Guidelines for Visiting Researchers/Access to Information" was signed. The agreement outlines the rules and procedures for researchers wishing to conduct research on the 'Namgis reserve. A formal presentation was made to Village Council and one Councilor was appointed as a liaison person to provide input and assistance in study design and implementation. Presentations and meetings also were held with representatives of the Cormorant Island Economic Development Society and the Inner Coast Natural Resource Centre to obtain their feedback on the research proposal.

Methods of gathering information from each organization were agreed upon at this time. Background literature and names of interview candidates were provided by key contacts in the organization. In the case of the Kwakiutl Territorial Fisheries Commission (KTFC), the researcher was invited to participate in a five day visioning workshop held by the organization in November 1997.

Finally, a presentation by the researcher, open to all interested organizational representatives and community members, was held in February 1998. The presentation and subsequent discussion provided yet another opportunity for questions or concerns about the research to be raised. An article about the research in the local paper (the North Island Gazette) also encouraged questions and input.

2.6 Data Collection

Triangulation in data collection methods has been employed in this research. Use of a variety of methods was intended to allow the researcher to capitalize on the advantages and address the weaknesses of each and to corroborate or discredit evidence gathered through each individual source. Potential for skewed data due to respondent or researcher bias was minimized, if not eliminated, in this manner.

2.6.1. Documentation/Secondary Sources

The data collection stage of the study began with the collection of previously documented information about CED, fisheries and resource management initiatives on the North Island and in Alert Bay. It was felt that in order to understand the context within which CED and community-based fisheries initiatives in Alert Bay took place during the study period, it was necessary to develop an understanding of key characteristics of the community, its history and present state of well-being. Therefore, information about the status of, and trends in, community well being was also gathered, along with documentation of community history. The research is clearly an examination and evaluation of process rather than an assessment of Alert Bay's sustainability at this point in time. However, an evaluation of community well-being at the present time provided the additional benefit of helping to determine the degree to which the substantive issues facing the community are being addressed by the development process.

Documentation on community location, history and demographics as well as indicators of community well-being within seven areas: economy, municipal finance, education, housing, health, social capital/sense of community and environment, was compiled. An eighth component of community well-being, culture, was also present as a recurring theme. This community profile information is summarized in Cormorant Island

Community Profile (Vodden, 1999).

In summary, documentation was collected if it fulfilled one of four objectives:

- provided indicators of community well-being in Alert Bay within the seven categories listed above or insights into the community's historical development;
- described a community economic development or local fisheries initiative within the study area;
- provided information that would help to determine the degree to which these initiatives follow the principles and implementation steps reflected in the checklists; or
- provided insight into the barriers to and/or factors in the success of a particular initiative.

In addition to the statistics and documentation gathered for the community profile, meeting minutes, articles from local newspapers, newsletters, annual reports and work plans pertaining to local development organizations were gathered. Document collection began in 1996 and continued throughout the period of the study as further information needs were identified.

2.6.2. Interviews and Observation

In the process of data collection the researcher set out to document the opinions and insights of citizens and community leaders regarding the development processes taking place in their community. This was accomplished in two ways: through observation (including informal interviews and communications); and through semi-formal, tape-recorded interviews with a cross section of community members and development officials (see below for a profile of respondents).

Participant Observation

The first of the primary data collection methods employed was participant observation, including the use of field notes taken in 1996, 1997 and 1998. During this period of observation the researcher's role in the community development process ranged from serving as a contracted CED Facilitator/Advisor to the Village of Alert Bay and Inner Coast Natural Resource Centre (ICNRC) to attending a November 1997 five-day Holistic Management conference and planning session hosted by the Kwakiutl Territorial Fisheries Commission (KTFC) as an invited guest participant.

Observation throughout 1996 and 1997 was critical in assisting the researcher with access to the case study community and identification of the "key players"/informants. Observation also was used to gain an initial familiarity with the development issues, initiatives and processes taking place on Cormorant Island. This information was found to be useful in developing and fine-tuning the research methodology. Subsequent observations were used as a method of: a) corroborating other evidence; b) gaining insight into the perspectives of a larger number of community members than would be possible utilizing only interviews and documentation; and c) gaining an more in-depth understanding of community economic development organizations and initiatives than could be gained "from the outside".

CED is a process constructed by individuals within a community. Its success is determined in part by the qualities of, and relationships between, these individuals. Participant observation is one of few methods with the potential to provide such intimate knowledge of people and their relations. Participant observation, therefore, can be a very useful tool in CED research. There are also, however, a number of significant challenges that must be addressed by researchers who chose to use participant observation as a data collection method. Babbie (1986) has suggested the following ways to "rule out the observer effects": adopt an overt (but not obtrusive) observer role to address ethical concerns such as deception; identify personal biases and preconceived notions, make efforts to be aware of and minimize the effects of these biases and preconceptions during data collection and analysis, and reveal these efforts when reporting research findings; be conscious of the consequences of the researcher's role in the process he/she is observing; and record observations with detailed and frequent field notes as well as photographs. Every attempt was made to take each of these steps during participant observation and subsequent data analysis.

Interviews

An interview is described by Berg (1989; 13) as "a conversation with a purpose". The purpose of the interviews conducted during this research was to obtain information from the respondents on: their understanding of the concepts of CED, sustainable development, and fisheries co-management; the importance they place on the principles of SCED and co-management within local development processes; their knowledge of and opinions about development processes taking place (including conditions for and barriers to their success); and their own desires with

respect to the future direction of SCED and co-management efforts, their communities and local economies (see Appendix 3 - Interview Schedule). Questions were designed to provide information on each of the checklist items. The interviews generally followed an open-ended, semi-structured format. Although a set of interview questions was developed according to the research framework, significant opportunities were also provided throughout the interview for respondents to discuss additional topics they considered relevant and/or important. Further, the interview schedule was modified in some cases according to the respondent. Reasons for varying questions asked included a desire to capture more detail on a respondent's specific organization or area of expertise, an expressed desire by the respondent to focus on related areas of their choice, and requirements to shorten the interview to accommodate respondent time availability. Thus, the interview schedule remained flexible.

Three test interviews were conducted initially (one 'Namgis, one Village of Alert Bay and one resident/business person). Feedback from these participants was solicited on topics such as respondent comfort, appropriate language, nature of the questions and interview length. The interview schedule and recording procedure was subsequently revised.

The majority of the interview candidates were selected because key contact people recommended them for their knowledge and ability to represent the views of participating organizations (e.g. members of 'Namgis and Village Council, organizational staff and Board members). Others were selected because they belong to a resident group of particular significance (e.g. displaced fishermen, who represent the "clients" of many ongoing employment development initiatives). Finally, certain community members have knowledge of specific aspects of CED and community involvement in fisheries management (e.g. a banker's knowledge of local investment). These candidates were identified both through observation and the suggestions of key informants ("snowballing"). An additional goal was to achieve a balance of First Nations and non-First Nations representation in the interview respondents that reflected the community's population breakdown, as well as other factors thought to be of potential significance, such as length of residence, age and sex.

Interviews were conducted from December 1997 to June 1998. In total 36 people participated in 30 different interview sessions. Of the respondents, nine were members of the 'Namgis Chief and Council, five of the municipal Mayor and Council, five were representatives of other Alert Bay-based First Nations organizations, five of regional organizations involved in CED and/or resource management in Alert Bay, five were participants in a community tourism training/planning initiative (Tourism Alert Bay), and seven were community members selected based on their experience in fields relevant to the study. These "other" individuals included a fisheries biologist, banker, displaced fishermen, community activists and volunteers. Nearly all held some form of community leadership role and were active in community development initiatives and processes. It is important to note, therefore, that the respondents are from a particular segment of the citizenry (those that are politically involved and/or active community volunteers) and are, therefore, not representative of the population of Cormorant Island as a whole. See Appendix 4 for a profile of respondents by education level, occupation and employment status, age, length of residence, First Nations ancestry, and gender. Because of variations in the interview questions asked, time constraints of some respondents and variable sound quality, however, there are not 36 responses to each interview question.

Time per interview varied according to the respondent. On average interviews took approximately two hours, although length ranged from one to four hours. As with field notes, interview records and audio tape recordings were carefully handled and stored to ensure confidentiality. Ethics requirements for adequate information, consent, and confidentiality were addressed during the process of contacting interview respondents and during the interview process itself, as well as in subsequent data analysis and reporting.

2.7 Analysis

Data gathered were used to determine whether or not the case study community is moving along a path towards SCED, in part through fisheries co-management, and, if so, to identify some of the mechanisms and processes through which this has been achieved and the relative importance of fisheries co-management to this success. This determination was made primarily by using a series of checklists (criteria). Data were used to compare the case study with an "ideal" process, reflected in the checklists. The process by which a "yes", "no", "to some degree" or "uncertain/no response available" response was assigned for each checklist item is described below. Coding and pattern searching were critical steps in the analysis.

2.7.1 Transforming the Interview Data

Transcribed interview responses were grouped according to question number and five respondent categories: 'Namgis (N), Village (V); other First Nations organizations (T); regional organizations (R); and other respondents (O). Categories were chosen that were sufficiently large that individuals within them could not be identified. For example, First Nations and regional organizations with only one or two respondents from each were grouped together with others of a similar nature. Each interview was then assigned an identifier that reflected the category with which it was associated (e.g. N1).

Next, transcripts were entered into a series of five Excel spreadsheets, one for each respondent category. Each question was designated as either a "code" or "list" response. Coded questions were those for which responses could be grouped according to a limited number of identifiers, such as questions with a yes (Y), no (N), uncertain (U), or some other (O) response. After all transcripts within a given category had been entered, the total number of responses of each code type was tallied for each coded question. For example, Q 2.1 "Have you heard the term sustainable development before?" was coded according to the yes (Y), no (N), uncertain (U) or other (O) list of responses. Within the Village (V) category, for example, all five responses to this question were positive (Y). In contrast, responses were mixed in all other respondent categories.

Questions designated as "list" questions were those for which there was no initially recognizable pattern of response. For these questions it was necessary to list all responses together in order to look for patterns and identify the range of, and level of agreement between, responses. Where applicable, these comments would later be coded by checklist item. In some cases "list" question responses were summarized using key terms or phrases. For an example see Table 1 below.

Table 1 Example of summarized list response

2.3 b. How would you describe a sustainable community?
Community that can sustain itself (3) Hold status quo Enables community to sustain themselves with adequate standard of living in perpetuity Enough work and services for people to sustain themselves People are staying in the community Renewable resource Looking for alternatives, employment (2) Something that can survive economically Economic base that employs all people

2.7.2. Review of the Data

The next step was to review all notes from field observation and secondary documentation, as well as the interview transcripts. The purpose of conducting this step prior to coding according to checklist item (see below) was to identify patterns in the data that did not correspond to the predetermined checklist items and topics. In fact, pattern searching proved an important technique throughout the analysis phase. This initial review process identified the need for a new checklist corresponding with sectors of activity, as programs and strategies being undertaken appeared to be more sector than activity-based. New topics of particular concern to the community that were not included in the initial checklists, such as treaty negotiations and youth, were also revealed. Once identified, these new topics were also assigned a code number. This step was significant as a method of minimizing the possible impacts of researcher bias for the existing framework and fulfilling the research objective of testing the framework for errors and omissions.

2.7.3. Coding and Grouping Data According to Checklist Item

Each checklist item was given a code number (e.g. B1-16 for SCED strategies, C1-17 for SCED principles etc.). To ensure room for identifying further patterns/points raised that did not

correspond with the existing checklist items, an "other" code number was added to each checklist. For example, for all information relating to strategies not covered in checklist items B1-15 a code of B16 was given. Each point found in the notes from field observation, interviews, and documentation was reviewed and, if possible, assigned one or more of the code numbers. Data were then grouped together by checklist and code in Word files. For each item the source of the data was noted for later referencing (e.g. name of the source document, interview identifier, observation date/location). After grouping data were reviewed for the purposes of identifying patterns of response and discrepancies or corroboration between data sources.

During this process the overlap between various checklists that had been identified initially in the literature review became increasingly apparent. Some pieces of data corresponded with as many as five different checklist codes. For example, actions against environmental degradation caused by local industries have been taken by the Kwakiutl Territorial Fisheries Commission (e.g. monitoring of fish farm pollution). These actions provide a demonstration of environmental business management activity (strategy code B14), concern for ecological integrity (principle C1), and involvement in environmental stewardship (principle C2, co-management success factor I2, SCED factor J32). In these cases, rather than copy each piece of data five times under the title community stewardship in Checklist I, for example, a note was simply added saying "see B14".

2.7.4. Application of the Research Framework: Relating the Checklists and Coded Data

After coding, grouping and analyzing data, a response was assigned to each checklist item within the research framework. The range of possible responses considered for each type of checklist was as follows:

1. Strategies (SCED and fisheries co-management):

a. Yes — strategy is currently being pursued;
b. To some degree - opportunities have been identified, planning underway but no significant actions have taken place and/or activity is limited;
c. No — strategy is not currently being pursued; or
d. Uncertain — information is insufficient to indicate response, or there is too much disagreement between sources to ensure accuracy of response.

2. Principles (SCED, sustainable fisheries, co-management)

a. Yes — believe that principle is important and actions have been taken/programs put into place that demonstrate this (medium to high level of activity in support of this principle, majority of indicators have been addressed);
b. To some degree — seen as important, have expressed intent to pursue but no significant actions have taken place and/or some but not the majority of indicators have been addressed (low to medium level of activity);
c. No — actions supporting this principle have not been taken; or
d. Uncertain — information is insufficient to indicate response, or there is too much disagreement between sources to ensure accuracy of response.

3. Process Steps

a. Yes — actions have been taken to include this step in the planning/ development process;
b. To some degree — seen as important, have expressed intent to pursue but no significant actions have taken place (limited activity);
c. No — no actions have been taken or planned to pursue this step in development/planning process; or
d. Uncertain — information is insufficient to indicate response, or there is too much disagreement between sources to ensure accuracy of response.

4. Conditions for Success

a. Important
b. Somewhat important

c. Not important
d. Uncertain

a. Present in the community/organization
b. Present to some degree
c. Not present
d. Uncertain

Responses given for each checklist item reflect the degree to which the conditions associated with each response described above were demonstrated to be present by a) the files of data grouped by checklist item/code; and b) the coded or listed responses to specific interview questions directly associated with each checklist item. For example, ability to raise outside, private investment capital is considered to be one factor in the success CED (checklist J, code J16). Interview question 9.24 asked directly about the ability of participating organizations to raise funds from outside business interests. Further, question 9.25 inquires about the primary source of funding for the organization's CED initiatives. The responses to these questions were first considered when attempting to assign a response to checklist item J16. For the Village of Alert Bay, responses to these questions suggested that the Village has had little previous success with attracting private investment from outside of the community and that the majority of funding for development activities had been provided in the form of grants from senior governments. Grouped data files on success factors (financial) and self-reliance were then reviewed for corroborating or conflicting information. This additional evidence confirmed that inability to raise private capital is a barrier to success in the community (particularly with respect to tourism development). It is felt that a significant input of senior government dollars for infrastructure upgrades will be necessary before private investment can be attracted. In the end, therefore, an "important" but "not present" response was assigned to checklist item J16 - ability to raise outside investment — for the Village of Alert Bay.

As expected, the most difficult checklist items to determine responses for were the principles. In large part this is because of their "value-based" nature. To assist with this task a set of more specific guiding questions for determining if a principle has been followed was devised (see Appendix 2). Interview questions were designed to provide responses to these questions. If the answer was "yes" or "to some degree" to all of those guiding questions (with a majority of "yes") than a "yes" answer has been given to compliance with the principle. Similarly a response of "no" or "to some degree" to all guiding questions (with a majority of "no") resulted in a "no" response to compliance with the principle. Some "yes" and some "no" or a majority of "to some degree" responses resulted in a "to some degree" response for the principle.

2.7.5. Analyses Not Based on the Checklists

Although the emphasis of this research has been placed on the concepts embodied within the checklists (research framework) discussed above, several other topics and questions have also been considered. The method of analysis used in considering these questions is similar to that described above, relying on pattern searching and corroboration of multiple evidence sources. For example, one objective of the field research was to determine how community members define their community, as well as other key terms. This analysis relied heavily on the interviews, involving a review and description in summary form of the appropriate interview responses. Examples of the results of this process have been provided above (see page 18).

2.8 Summary

In summary, the researcher has followed a detailed research design, flowing from literature review and framework development through to thesis review and dissemination (see Figure 3).

Initial participant observation

Figure 3 The research process

The final results of this research have been disseminated in several ways: through the thesis document itself; written and oral presentations to the community; the Cormorant Island Community Profile (Vodden, 1999); and numerous other publications and presentations targeted to a

broader audience of academics, policy makers, resource managers and CED practitioners.

CHAPTER THREE

LITERATURE REVIEW AND FRAMEWORK DEVELOPMENT

The following chapter presents the results of the literature review component of the research and the research framework that was developed based on these results. A definition of key terms is provided (3.1), followed by findings related to SCED (3.2) and fisheries co-management as a SCED strategy for fishing communities (3.3).

3.1 Definitions

3.1.1. Defining Community and Resource-Dependence

The term "community" can be defined by a geographic area, the boundaries of which may be identified in numerous ways, including: political jurisdictions; biophysical characteristics; historical patterns of settlement; land use or affiliation among residents. Communities can also be defined as "communities of interest", people with something in common other than their place of residence, such as gender, kinship, ethnic background or political beliefs (Bryant, 1999; McRobie and Ross, 1987). Often both definitions are relevant to CED initiatives as members of a geographic community come together to develop a CED strategy, working at the same time to ensure that communities of interest within that geographical community are adequately represented and heard during the process.

This study examines the CED process taking place within a specific type of community - the "resource-dependent" community". BC communities have always been dependent on natural resources for their economic well-being. Although an increasing number of communities in BC are diversifying their local economies; to a large extent resource-dependence is still the norm, particularly in rural regions (BC Round Table, 1993). Resource dependence can be defined as economic reliance on one or more natural resource-based industries or sectors. A single industry community relies on only one of these natural-resource industries. A number of varied definitions exist for economic dependence. Most use some economic measure such as employment, income or earnings as a determining factor (Pharland, 1988; Horne and Powell, 1995; Williamson and Annamraju, 1996). Clemenson (1992), for example, defines economic reliance as a state when 30% or more of the local labour force is employed in the industry or sector in question. This is the definition used as a criterion for case study selection in this research.

3.1.2. Defining Sustainable Development

Traditional economic development practices have left a legacy of economic, social and environmental problems around the world. Resources have been extracted at rates greater than they can be renewed and wastes generated faster than the air, water and soils can assimilate them. Many of the materials we produce, in fact, can never be assimilated, recycled or reused by either natural or industrial systems (e.g. certain hazardous wastes) (Hawken, 1993; Vodden, 1997). In short, the earth's "natural capital" has been depleted as a result of an economic system that is based on a philosophy of limitless growth (Constanza and Daly, 1992; Rees; 1992). By depleting natural capital stocks rather than living off the "interest" they provide, we not only reduce their potential for the production of goods and services for human use (Sunkel, 1987) but also their ability to sustain future generations and other species (Vitousek et al, 1986). Further, changes such as technological "advancement" and increasing capital mobility have resulted in the benefits of production being distributed to fewer and fewer people (Brown, 1995). As the gap between the rich and the poor, the powerful and the disempowered, widens our social capital is also diminished.

For many years the links between the economy, the environment and social justice were ignored by decision-makers. But in 1987 the Brundtland Commission, officially known as the World Commission on Environment and Development, warned that environment and economy could no longer be considered in isolation from one another or as contradictory objectives. The Commission called for a new form of development that takes both spheres into account (WCED, 1987; CORE, 1995). They called it sustainable development.

Since the publication of the Brundtland Report many people, citizens, politicians and business leaders alike, have come to recognize that the environment sustains our economies and that, if the health of our environment is harmed, ultimately the health of our economies will be as well (e.g. Pearce, 1991). This fact is evident in British Columbia's forest, fish and mineral economies, for example, where depletion of resource stocks has resulted in plant closures and job losses (Druska, 1993). These symptoms are typical of 'mature, advanced' staple economies that overexploit and are then left with a painful period of adjustment (Davis and Hutton, 1992; Innis, 1933). Daly and Cobb (1994) refer to this as development that impoverishes rather than enriches.

Although the phrase sustainable development has been defined in many ways since the publication of the Brundtland Report, the original description is still among the most popular: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987; 43). Sustainable development recognizes that there are limits to economic growth and levels of human production and consumption. It emphasizes qualitative development rather than quantitative growth, thus adding a third dimension to considerations of environment and economy - social development. Ecosystem preservation will not occur unless poverty relief and economic health for communities of all nations can be provided (Rees, 1990). For example, "it is already clear that most less developed countries will not become party to environmental controls unless the North accepts responsibility for current problems and is willing to pay the costs of their mitigation" (Rees, 1990; 443). Regional economic disparities present similar problems. Resource workers, for example, resist having to bear the cost of wilderness preservation when the majority of the benefits of resource consumption and profits are received by urban dwellers (Brown, 1995).

The implications of qualitative development include the redistribution of economic benefits and the development of the spiritual, social and cultural qualities of human nature rather than simply the creation of material wealth. Finally, sustainable development recognizes the importance of local issues and actions which, when combined, determine our global situation. Thus the importance of the concept of community to sustainability. Sustainable development requires sustainable communities (Roseland, 1994) and communities require sustainable development if they are to continue from generation to generation (Ommer in Muzychka, 1996).

Despite widespread recognition of its importance, there is still significant debate about the meaning and environmental, social and economic implications of sustainable development. The debate is founded in the existence of different sustainable development paradigms or worldviews (Pierce, 1992). These paradigms range from "ecocentric to technocentric" and from "sustainable development to sustainable growth/utilization"(Feagan, 1993; O'Riordan, 1977, 1988; Pierce, 1992; Rees, 1990).

The authors referred to above demonstrate that continued growth and "business-as-usual" cannot be sustained in the long-term and that viable alternatives that bridge the gap between the "theory", or paradigm, and practice of sustainable development are needed. Community economic development may provide one such alternative.

3.1.3. Community Economic Development

Like sustainable development, community economic development (CED) has been defined in a multitude of ways. Each of these definitions, however, share common characteristics which distinguish it from traditional forms of economic development activity. In a 1987 report McRobie and Ross synthesized the various definitions of CED into the following: "Community Economic Development is a process by which communities can initiate and generate their own solutions to their common economic problems and thereby build long-term community capacity and foster the integration of economic, social and environmental objectives" (McRobie and Ross, 1987; 1). This description emphasizes local involvement in, and control of, the development process. CED is recognized as distinct from forms of economic development where, for example, a consultant from outside of a community comes in to complete a study and then makes recommendations on what the community should do, or when senior governments initiate and implement a development program based on broad policy directions rather than local realities. CED is also distinct from conventional economic development because it gives precedence to communities over the more narrowly defined interests of consumers or shareholders. Finally, it is distinct from local economic development (LED), which is focused on local communities but tends to have narrowly-defined, purely economic objectives (Blakely, 1989), be less participatory and dominated by local elites (Boothroyd and Davis, 1991; Burkey, 1993; Bryant, 1999; Gill and Reed, 1999). McRobie and Ross (1987) point out that their definition is purposely broad, taking into account the full range of local initiatives and practices that may be defined by communities themselves as CED. "It is not up to the theoreticians to define CED; it is up to the local communities which are struggling with new ways to create employment" (McRobie and Ross, 1989; 1).

3.1.4. Sustainable Community Economic Development

In the past decade, the notion of sustainable development has gained increasing recognition within the field of CED; just as the need for healthy local economies is acknowledged by a growing number of individuals and organizations within the environmental movement. Sustainable community economic development (SCED) is a brand of CED that combines the principles of

both sustainable development and community economic development. In doing so, SCED emphasizes the realities of the natural world (e.g. limitations on our ability to utilize the environment as a source of resources and as a waste disposal site), but also the local social, cultural and economic realities that are brought into the development process through meaningful public participation. The overall goals of SCED are ecosystem and community health. When used in this context the word health is meant in its broadest sense: "health as wellness rather than absence of disease" (Roseland, 1997; 1).

Sustainable CED attempts to balance the best interests of both local communities and the broader society (Bryant, 1999). It is equitable, community-based and does not threaten the integrity of global or local ecological systems. While it could be argued that CED is intrinsically sustainable and therefore that CED and SCED are one in the same, in the past CED initiatives have tended to focus on human-centered aspects such as social justice and self-reliance (International Institute for Sustainable Development, 1994; Vodden, 1997; Bryant, 1999). For example, the definitions of community provided above are those most commonly cited in CED literature. They describe human communities. Ecologists broaden the definition of community to include all of the species that occur together in space and time (Begon et al., 1990). Like ecologists, practitioners and researchers of SCED seek to understand the interactions of human and other species by considering the impacts of human development on other species dependent on the same resources.

Bryant (1999) argues that CED is evolving from a 'war on poverty' to an integrated approach that includes environmental values. Despite this apparent progress the author prefers to use the term SCED as a matter of emphasis on the primary importance of ecological integrity to sustainable development and because, for many practicing in the field, the term CED does not necessarily imply a movement towards ecological sustainability and environmental responsibility, along with social and economic change.

3.1.5. Defining Co-Management

Natural resources in British Columbia are managed almost exclusively by senior governments; forests primarily by the Province of BC and fisheries by the federal government through Fisheries and Oceans Canada (formerly Department of Fisheries and Oceans - DFO). The Province of BC has also begun to play a greater role in the management of marine resources. In the meantime, local communities are both demanding a greater say in the management of fisheries and taking on increasing responsibilities. However, an immediate relinquishment of resource control from senior governments to communities is neither realistic or being called for.

It is generally acknowledged that the agencies currently responsible for resource management hold necessary resources, infrastructure, expertise/information and an ability to look objectively at the overall scenario from a distance. Communities often do not have the capacity, or in many cases even the desire, to take over these responsibilities entirely (Coastal Community News, Sept. 1997). Therefore, if increased community involvement in resource management is to become a reality it must be in partnership with government agencies (including First Nations) and other stakeholders.

Term used to describe this type of partnership include "community management", "co-management" and "cooperative management". These terms, however, each imply a distinct set of relationships. The first implies that the majority of the responsibility and control lies in the hands of the community. The second suggests that all parties involved share some decision-making authority and/or management responsibility, in a true partnership. The latter simply implies some level of communication or cooperation. One BC Aboriginal fisherman put it this way: "to DFO cooperative management means: we decide, you cooperate" (Gallaugher et al., 1997b).

The roles community and stakeholder groups involved in the management of natural resources can play range from being informed and offering comment regarding proposed policies or programs, to sharing real decision-making authority with a management agency, to having the sole authority and responsibility to make decisions, implement and enforce them. Cooperative management lies on the left side of this continuum of arrangements, co-management in the middle and community management on the right (Pinkerton, 1989).

I_____I_____I

Cooperation Co-management Community Control

- *Information sharing* - *Shared decision-making* - *Exclusive local*

- *Consultation & responsibility authority*

Source: Pinkerton (1989)

Figure 4 Continuum of community involvement and participation

3.2. Creating a Framework for Sustainable Community Economic Development

The practice of community economic development (CED) has existed for well over a century. Along Canada's eastern coastline the earliest cooperative enterprises began in the 1860s. True to the spirit of CED they focused not only on economic but also social, cultural and educational initiatives (Wismer and Pell, 1981). However, the field did not receive the attention of "mainstream" Canada until the recession of the early 1990s when, in the search for alternatives to failing economies, CED gained popularity among communities and governments alike. Both the Ontario and British Columbia provincial governments, for example, formed CED Secretariats at this time. The Yukon 2000 Development Strategy grew out of both a recession and the realization that previous "top-down" approaches had not been successful (Decter and Kowall, 1989). In 1990 the Economic Council of Canada released a statement that described community-based economic development as a "new approach" that may be "precisely what is needed" to fully mobilize the human and physical resources of local economies (Economic Council of Canada, 1990).

Despite a relatively long-lived history as a practice, no unified set of guidelines for successful CED has been developed. This is partly because diversity is a key tenant of CED and a characteristic of the communities it serves (Schultz, 1996). The practice of CED differs in every location, according to the unique situations, histories and peoples within communities and the ecosystems of which they are a part.

In attempting to build a "theory" of CED and to establish best practices despite this variety, researchers have searched for commonalities in case studies. Some researchers contend that not enough of this synthesis has been done (personal communications, Roseland, M. and Pierce, J., 1997). Out of the research of this kind that has been conducted to date, as well as dialogue between communities and practitioners, a number of guiding principles for CED have been identified. Perhaps the most fundamental of these are self-reliance and community control. Equity and broad-based public involvement in economic development planning and decision-making also are key (see Table 5, p.56 for a complete list of SCED principles). Further principles include: capacity building; collaboration; integration; collective benefits; long term planning and action; and community-building (Schultz, 1995; Lauer, 1993; Dauncey, 1988; Boothroyd and Davis, 1991; Wismer & Pell, 1981).

3.2.1. CED Strategies

To put the principles of CED into practice various strategies for economic renewal and enhancement of community well-being have been employed by communities and identified in the literature. Table 2 outlines 13 of these strategies:

Table 2 Thirteen strategic options for CED

1. Plug the leaks (outflow of resources)
2. Initiate and encourage new enterprises (business and social entrepreneurship)
3. Support existing enterprises / business retention
4. Develop human resources
5. Work sharing
6. Strengthen the informal economy
7. Recruit compatible new businesses
8. Increase local ownership
9. Develop physical infrastructure
10. Community resource management
11. Make improvements to the local environment
12. Undertake other quality of life improvements (health, social, recreational amenities)

13. Celebrate local identity and culture

Blakely (1989) points out that these alternative strategies can, and will in most cases, be combined, with those strategies most appropriate for the socioeconomic circumstances being employed.

3.2.2. Creating Conditions for Success

Because of the diverse circumstances within communities, the development of a set of rigid, prescriptive rules for successful implementation of CED initiatives is not an appropriate or realistic goal. Mitchell (1989) describes prescriptive models as difficult to implement when the problem being confronted is not clearly defined, the necessary data are not available or "intangibles" exist that require consideration. These conditions are often rampant in communities. He points out, however, that despite the fact that "real world processes do not usually approach the prescriptive ideal" (Mitchell, 1989; 272), comparison with prescriptive models can highlight process weaknesses (e.g. missing information). It is generally recognized that by establishing process guidelines and determining favourable conditions for success based on the past experiences of communities, researchers can provide useful information for communities engaging in CED.

Researchers have identified a series of conditions present within communities that have launched successful CED initiatives. [Note: A successful initiative is taken here to mean a project or program that has met the objectives it was intended to accomplish. However, "failures" in CED are valuable learning experiences. Therefore, in another sense, even initiatives that have failed to meet their objectives can be considered a success.] Determining the presence (or absence) of these conditions, or "success factors", in a community can help community members and CED practitioners assess the likelihood of their goals being achieved when entering into a CED process (an assessment of the community's capacity for undertaking CED). Identified conditions for success are shown in Table 3 below.

Obviously CED is not easy. The conditions for success presented above are daunting, particularly for those communities with little prior CED experience. Further, even if these conditions are met success cannot be guaranteed. "…an individual community can only influence and guide its development path. Other factors such as international markets, environmental conditions and shifting demographics (among countless others) also have their roles in molding a community" (Hussmann, 1993; 8). Technological change and government policy can also have a profound effect on local economies (see below, for example, for more on how these factors have influenced fishing-dependent economies). It is doubtful that any community has all of the conditions for success outlined below. However, many of them can be created. Capacity building initiatives, for example, may be needed to create the ability of community leaders to coordinate the process and of citizens to participate effectively. In fact, several of the CED strategies outlined above are meant to build capacity - to enhance a community's ability to launch and maintain successful CED initiatives.

Table 3 Success factors for CED

1. A sense of community identity, history and culture.
2. A dynamic leader or "sparkplug" (often an elected public official, e.g. the mayor) and/or a core group of committed individuals who, together, have the necessary skills, know-how and community acceptance).

3. A crisis or major concern motivating local leaders to act (a felt need).
4. A realization that if things are going to happen they (community members and leaders) have to do it themselves.
5. The ability of local leaders and the community to work together and mobilize broad-based support.
6. Available local resources such as a specialized yet flexible, young and/or educated labour force, information and trade networks, infrastructure, healthy, productive renewable natural resources or other features, such as a tourist attraction, offering a competitive advantage.
7. Existing education, training programs and learning opportunities (includes adult education, conventional educational institutions, informal learning options).
8. Senior governments that are willing and flexible enough to follow the community's lead, to provide advice and cost-share development initiatives.
9. Investor confidence (where lacking, community seeks to rebuild).
10. Entrepreneurial spirit (number of new enterprises, participation in business development programs and services, business success rates, local ownership of local firms and resources).
11. Willingness and ability to collaborate. May involve a regional approach among neighbouring communities (e.g. cooperative marketing, shared services).
12. Existing range of CED related businesses, community organizations and, in resource communities, of community resource management and planning initiatives (CED experience).
13. Supply and demand networks among local enterprises (e.g. equipment suppliers, harvesters, value-added manufacturers) - existing and opportunities for development.
14. Social and cultural amenities.
15. Health and well-being (current levels and related services).
16. A long-term approach (willingness and ability to sustain development efforts over the long-term).
17. Availability of internal and external funding/financing mechanisms.
18. A base of informal economic activity.
19. Availability of professional support and technical services for local organizations and entrepreneurs, marketing expertise.
20. Willingness and ability to utilize a strategic planning and evaluation process in CED efforts.
21. Ability to adapt to changing circumstances.
22. An innovative idea, plan or solution.

Sources: Young and Charland, 1992; Ameyaw, 1997; Kinsley, 1996; Economic Council of Canada, 1990; Wismer and Pell, 1981; Pierce, 1995;

Stacey and Needham, 1993

Capacity-building

The absence of a number of the conditions listed above, therefore, should not be viewed necessarily as a recipe for failure. When assessing community capacity, in the case of absent conditions, two questions must be asked: 1) How critical are these conditions to the success of

CED in the community or of a specific CED initiative being considered?; and 2) Is it likely that the community can create those conditions that are absent (or weak) but considered to be important? Such a checklist of "ideal conditions", consequently, also serves as an assessment of training and development needs and can help communities decide which CED strategies to pursue.

While capacity-building initiatives are often invaluable, they are not always sufficient. Not only do external factors such as those referred to above (e.g. international markets and environmental conditions) come into play, but several of the conditions for success listed above are difficult to create or enhance. The existence of: a) a crisis or major concern; b) appropriate leadership (with the right skills, community support and "we'll do it ourselves" attitude); and c) willingness of the community to get behind their leaders and participate; and d) available natural resources are specific examples. These factors, therefore, are among the most important pre-existing conditions to look for in a community when launching a CED process.

Leadership

While resources that can be drawn upon for economic development can be found in many communities, appropriate leadership is an especially critical and challenging human resource requirement. The Report of the Commission on Employment and Unemployment in Newfoundland (1986; 380) notes that most success stories examined by the Commission came about "because a small group of dedicated people worked hard to put in place the organizational and institutional framework that made local development possible". Yet in many communities this small group of dedicated people is not readily identifiable or even present.

Exacerbating the challenge of finding "a leader", is the range of skills that are required of community leaders to facilitate a CED process. These skills are not often found in one individual. Blakely (1989), for example, describes an effective economic development manager as a visionary, risk-taker, innovator, motivator and coordinator. For CED additional skills and characteristics are required: cross-cultural sensitivity and facilitation, for example. Wismer and Pell (1981) identify two often conflicting skill sets that are required in CED - that of the initiator and that of the manager. Finding an initiator and a manager, either in one person or in a team that works well together, is a difficult but critical task. An appropriate leadership style for the community in question is also important. "In some of the most successful initiatives, one person has given a clear and committed lead, saying 'This is the vision: now let's achieve it.' That is one way forward" (Dauncey, 1988; 110). In many cases leaders who are facilitators, helping citizens to generate the vision themselves, are more appropriate and better aligned with the self-help nature of CED.

Communities, particularly those lacking in leadership capacity, may need to be willing to accept newcomers in leadership roles. Schmidt et al. (1993) point out that newcomers with a wider range of experiences and greater social ties with outside organizations often initiate CED projects.

Barriers and Potential Pitfalls

While some conditions can create success, others can become barriers or "conditions for failure". The Economic Council of Canada (1990) identified five factors that can stand in the way of a successful CED program in small communities. These five handicaps include: 1) high unemployment, eroding skills and entrepreneurial energy, provoking migration of younger and better educated residents and leading to a decay in social amenities that help attract new businesses; 2) shortage of information available to residents in urban centres; 3) lack of basic social services (e.g. health care, senior's housing); 4) inadequate access to capital; and 5) cost disadvantages. Two additional barriers are: lack of physical infrastructure required for development (e.g. wharves, sewage treatment facilities or hotels for tourism); and conflict or divisive power struggles within the community that act as a barrier to cooperation and movement toward a common goal.

The Access to Capital Barrier

Inadequate access to capital is among the most frequently cited barriers to the success of CED initiatives. These initiatives often do not meet the requirements of mainstream capital sources, in part because economic returns are not the sole objective and, therefore, may be lower than alternative investments. Further, those involved may be considered a credit risk (e.g. low income and unemployed citizens). Therefore, a range

of alternative forms of financing have been devised as the practice of CED has grown. Canada's Calmeadow Foundation, for example, launched a program of micro-enterprise lending and borrowing circles in First Nations communities, initially in Ontario and then across the country, in 1987. Loans of up to $3,000 were made through a bank and guaranteed by Calmeadow. The Foundation also helped subsidize bank transaction costs and provided training for responsible officers. The Calmeadow program was based on the success of micro-credit schemes in Latin American countries, where experience had shown that jobs could be created at one-tenth to one-twentieth of the cost of job creation in the formal sector. Another frequently cited example of micro-credit is Grameen Bank in Bangladesh. The Bank has lent to over 500,000 people and has a loan repayment rate of 98 percent (Jackson and Pierce, 1990).

Community loan funds are another source of short-term lending capital formed to support CED. Loans may be larger than those of micro-credit programs. Most accept below-market interest returns and many offer technical assistance to borrowers (Community Economics, 1987). Community loan funds rely on community-oriented investors, both individuals and organizations such as churches, foundations and even private business. In some cases government agencies have provided loan guarantees to ensure security for loan fund investors (Vodden, 1997; Jackson and Pierce, 1990). Local credit unions, community banks and business development centers/Community Futures programs are also sources of capital for CED. By obtaining funds from such sources it is sometimes possible to lever additional capital from conventional sources.

Debt financing, however, is not the only option discussed in the CED literature. Share purchases and other equity arrangements, including worker ownership, have also been employed. In Chicago, for example, South Shore Bank runs the Neighborhood Fund (Meeker-Lowry, 1988). The Fund finances minority-owned businesses with venture capital. Socially and environmentally responsible investment options not only provide funding for CED initiatives but provide alternatives for investors concerned with the implications of their investment decisions (Meeker-Lowry, 1988). Such investments can also result in higher financial returns than those that are "non-screened" (Dauncey, 1988).

Joint ventures with private firms have also proven an effective method of accessing financing. The Great Northern Peninsula Development Corporation (GNPDC) in Newfoundland, for example, worked with a group of local sawmillers, forming a consortium capable of supplying Newfoundland Hydro's wood chip facility (Sinclair, 1989). Grants can also be obtained from government, foundation and corporate donors (Wismer and Pell, 1981). Despite this range of options, however, obtaining project financing remains a significant CED challenge, particularly in communities where few of these mechanisms exist.

Dependency and the Role of Government

Willingness of senior governments to support local development initiatives can also be a very important factor in success and is difficult to create in the absence of a supportive policy framework. Roseland (1994) argues that local initiatives must be accompanied by appropriate federal regulations and incentives if they are to succeed. Decter and Kowall (1989; 1) suggest that the commitment of senior levels of government was among the most important elements of the Yukon 2000 consultation process put in place to "take control over the future direction of the Yukon economy and to enhance the region's quality of life." In Ontario, a provincial election in the early 1990s resulted in a change in government and the subsequent cancellation of a provincial CED strategy and supporting programs. The change also caused the demise of many fledgling local CED initiatives in the province. While this example further illustrates the importance of government assistance, it also serves as a warning against reliance on governments for financial and other forms of support (Vodden, 1997). Reliance on government leaves a community open to many of the same risks as reliance on externally-owned and operated corporations; with, for example, decisions being made to satisfy the needs of outside agencies rather than the community and the risk of program failure if the supporting government agencies "pull out" (Blakely, 1989).

Dependence on one or few employers can also be detrimental. Dependency may result in reluctance to take on initiatives that threaten the status quo, particularly if major employers resist the direction proposed by a CED strategy (Halseth, 1998). Locally owned businesses may, however, be more likely to support activities that will enhance the well-being of their communities. Local ownership and economic diversity, therefore, tend to create conditions more conducive to CED.

A Success Factor Checklist

For the purposes of this research the conditions for success and failure (barriers) in CED have been grouped together into one checklist of factors for success in CED. These factors can alternatively be considered indicators of a community's CED capacity. Barriers have been included by describing their opposite conditions as factors of success. For example, shortage of information (a barrier) is rephrased as access to appropriate and reliable information (a success factor). The barrier of community conflict and power struggles contrasts the positive conditions of community organizations able to work together collaboratively, leaders able to garner broad-based support and social cohesion. Each of the factors raised in the literature were grouped under one of seven categories:

A. Human Resources and Human Resource Development

1. Clear and appropriate leadership
2. Availability of education, training programs and learning opportunities (includes adult education, conventional educational institutions, informal learning options)
3. Labour force readiness/availability (skill - specialization/flexibility, education levels, age, health, participation rate)
4. Management, marketing, technical/professional skills
5. Entrepreneurial spirit
6. Active citizens/volunteers
7. Willingness to change

A. Economic and Enterprise Capacity

8. Business success rates/economic health of local businesses

9. Diversity (reliance on one or few employers, sectors vs. variety of employers by size and type)

10. Local ownership

11. Local supply and demand networks (integration, backward and forward linkages, value-added - existing enterprises and opportunities for development)

12. Existence of outside trade networks/access to outside markets

13. Base of informal (non-cash) economic activity

14. Identified economic diversification opportunities

B. Financial Capacity

15. Availability of, and evidence of an ability to obtain, grant funding from external sources (eg. government, foundations or private donors).

16. Availability of, and ability to access, outside capital and credit (loans and investment). Investor confidence (where lacking, community seeks to rebuild).

17. Locally generated and operated funding, financing and granting mechanisms (eg. local credit unions, community loan funds or foundations, local investors). Ability to generate local capital also related to taxes and income generated in the community. Community is willing and able to invest its own money in the process or initiative.

C. Social/Quality of Life Factors

18. Sense of community identity, culture, history

19. Social and cultural amenities

20. Health and well-being (current levels and related services)

21. Social cohesion/collective spirit

A. Organizational Capacity

22. Range of community-based organizations and institutions (in resource communities includes range of community resource management and planning initiatives)

23. Health/effectiveness of community-based organizations and institutions

24. Broad-based community participation

25. Willingness and ability to sustain development efforts over the long-term (e.g. 10 to 30 years).

26. Willingness and ability to collaborate (within the community and outside of the community).

27. Experience with, and willingness to utilize, a strategic planning and evaluation process in CED efforts.

B. Natural Resources

28. Environmental health

29. Protected areas

30. Productive natural resources

31. Unique natural features of the community and surrounding region

32. Stewardship ethic (community concern for and steps taken towards ecological sustainability)

C. Community Resources — Other

33. Appropriate and reliable information (includes access to communications and information technology)

34. Physical infrastructure (underutilized buildings, sewage, water etc.)

35.Location/transportation infrastructure - distance to major markets and access to transportation routes

36. Ability to adapt (at individual, enterprise, organization and community level).

37. Senior governments willing and flexible enough to follow the community's lead, to provide advice, cost-share development initiatives and develop policies that will support local efforts.

(Also see Markey and Vodden (1999)).

This SCED success factors checklist, however, does not include process-related conditions and barriers. Instead a second checklist of recommended process steps that incorporates these findings was created. This process steps checklist is summarized below.

3.2.3. The Recommended CED Process

A flawed development process can destroy a community's chances of success. Potential pitfalls include: reliance on government (see above); letting the tools (e.g. a government program) determine the strategy; ignoring local labour supply realities; following a development fad (high technology, convention centers and tourism are examples) not suited to community's unique attributes and capabilities; and overlooking the capacity of an organization or community to undertake and manage projects (Blakely, 1989). Blakely (1989) believes that these pitfalls often occur because civic leaders are too anxious about getting results quickly. Lauer (1993) identifies three common process "traps" in CED, also related to the tendency to look for fast results: 1) the study syndrome (outside consultants prepare reports treating locals as spectators instead of participants, sense of ownership is not instilled); 2) the quick fix (inadequate discussion and planning): and 3) the autocratic leader (the loudest voice wins the public debate and gets his/her way but the people aren't really behind the idea and/or it has not been well thought out). Leadership pitfalls can also include reliance on the "local elite" (insufficient public participation).

While proper planning and process design is important, Edwards (1994) adds that without some tangible results and immediate rewards the momentum required for deciding on and pursuing a desired direction can be lost. Edwards, Chair of a local round table organization in central Canada, believes that "the right mix of rousing old-fashioned sleeves-up community work and what some would consider unproductive high-brow visioning" is required (Edwards, 1994; 15). Table 4 below outlines recommended steps for establishing a CED process or initiative.

Barriers to Public Participation in CED

Process step number three "build community support/involvement" is a particularly important step in the CED process, one that is ongoing throughout all remaining steps. Participation and getting people "behind an idea", however, can be a difficult task. Many people choose not to attend meetings or join coalitions because it means pulling away from their lives "to join a high pressure environment with few rewards", particularly when so-called "experts dominate the agendas of interminable meetings and demands on time, energy and money seem endless" (Brown, 1995; 258). As a result, the participation of rural working people in economic and political decision-making, Brown notes, is extremely low. She suggests collecting narratives from working people and providing effective representation for less powerful interests (e.g. through labour unions) as ways of capturing these people's input.

Table 4 Recommended CED process steps

1. Identify issue, need, opportunity				
2. Identify leader/core leadership group				
3. Build community support/involvement				
4. Create/select development organization				

5. Research other communities' experiences				
6. Design and implement planning process				
7. Ensure resources are in place for process				
8. Establish a vision				
9. Create/update community profile				
10. Identify/confirm issues and opportunities				
11. Assess local capacity/readiness for change				
12. Set long term goals and objectives				
13. Determine how success will be measured				
14. Create a strategy (with targets, goals etc.)				
15. Create local partnerships 16. Raise funds locally				
17. Generate additional capital/resources as required				
18. Implement project action plans				
19. Develop human resources				
20. Evaluate progress and, if necessary, adapt strategy				
21. Build on successes				

Beyond providing input, community members are also needed to perform volunteer roles in many CED initiatives. Volunteer as well as financial resources are often limited, particularly when increasing demands are placed on existing volunteers. "Volunteer burnout" is frequently cited as a barrier to community involvement. Thus, ongoing volunteer recruitment, recognition and support programs are often offered by development organizations. Bollman and Biggs (1992) point out that more people in Canada's small, rural towns volunteer their time than do urban residents. Publicity and outreach for CED initiatives can help encourage participation, voluntarism and generally build public awareness and support. Newsletters, local television spots and newspaper columns, for example, have been used by community groups and local governments to disseminate information and generate local interest.

3.2.4. Emphasizing Sustainability in CED

"We believe in resolving the ecological crisis by restructuring the economy."

Stephen Hall, The Coalition for a Green Economic Recovery

It is now widely recognized that environmental sustainability is required for communities to have healthy economies and healthy citizens over the long-term. In resource-dependent communities the link between healthy resources, healthy economies and healthy communities is particularly apparent. As natural resource stocks are depleted, due in large part to exploitation at levels exceeding the resources' ability to renew itself, communities that have relied on these resources for decades, even centuries, find their access to these resources restricted and their employment and income opportunities reduced. While local communities are greatly impacted by the restructuring that results when previous levels of harvest can no longer be maintained, they are often not the ones primarily responsible for the damaging practices of the past. Instead, in Canada, tenure holders, provincial and federal resource managers hold the decision making authority, resulting in further frustration and feelings of powerlessness at the local level (Memorial University, 1990). Resource degradation, and consequent economic impacts, can have a series of far-reaching negative effects on a community and its members. Crime, marital breakdowns, poor health, family, drug and alcohol abuse, for example, have all been linked to job loss (Economic Council of Canada, 1990; Brown, 1995). The decline of a resource sector upon which a community has been built can also result in a loss of community identity and culture. In summary, resource and ecosystem sustainability is inextricably linked to economic sustainability and to community well-being.

Several authors have explored the intersection of the concepts of ecological sustainability and CED and devised new principles for sustainable, community economic development; a unique brand of CED which recognizes that long-term community health and viability depends on healthy local and global ecosystems. SCED shares the principles of CED while placing paramount importance on ecological sustainability. Author of No Place Like Home: Building a Sustainable Community, Marcia Nozick (1992), sees the five major principles or "action areas" for sustainable CED as: 1) self-reliance (reclaiming ownership); 2) ecological sustainability; 3) community control (empowering community members to make decisions); 4) meeting individual and community needs; and 5) building a community culture, which she describes further as "getting to know who we are" (Nozick, 1993). The following list of principles (see Figure 5) is a compilation of those proposed by a range of authors. The emphasis and order of those listed reflects the experiences and beliefs of the researcher. A community's own list of guiding principles and points of emphasis may vary from the following according to local priorities and circumstances.

For the most part, SCED shares the strategies, success factors and process steps of CED, adding an emphasis on the importance of maintaining ecosystem integrity and in the role of human action in meeting this objective. Sustainability requires an ongoing effort to meet the first and primary principle of living within ecological limits, with individuals, organizations and communities continually seeking new ways to practice stewardship and environmental responsibility (Aspen Institute, 1996).

Adding an emphasis on ecological sustainability in CED also requires modification of the strategies, process steps and success factors for CED listed above. SCED strategies include: corporate environmental management (minimizing the environmental impact of existing enterprises) and environmental entrepreneurship (developing businesses that offer environmentally responsible products and services as a consumer alternative).

Table 5 Principles of sustainable CED

Living within ecological limits

Ongoing action toward environmental protection and restoration (stewardship)

Self-reliance and community control (self-help, self-determination)

Equity and social justice (satisfies needs of all community members, includes

Marginalized and disadvantaged groups, equity for future generations)

Broad-based public involvement in CED planning and decision-making

Economic viability

Capacity building (local leadership, organizational, individuals)

Long term planning and action (ongoing strategic steps towards a long-term vision)

Diversity (biological and cultural, economic, diversity of perspectives/backgrounds)

Collaboration (within and outside the community)

Integration (holistic approach, social, economic and environmental objectives)

Qualitative development (vs. emphasis on quantitative economic growth)

Recognition of the value of the voluntary/informal economy

Collective benefits

Community-building/community mutuality (looking after each other)

Entrepreneurialism (reward through risk, creativity)

Sources: Schultz, 1995; Goodland et al, 1993; Lauer, 1993; Dauncey, 1988; Nozick, 1993; Boothroyd and Davis, 1991; Renner, 1991; Wismer & Pell, 1981; Jacobs and Munroe, 1987; Gardner, 1988; Dovers, 1990; Bryant, 1999

SCED requires that the research and evaluation phases of planning and evaluating CED initiatives include an evaluation of environmental impact. SCED also adds a requirement to the "success factors checklist". Community leaders and citizens must share an appreciation of the importance of ecological sustainability to their own long-term well-being, and reflect that appreciation through actions of environmental stewardship. A complete set of strategies, principles, process steps and success factors checklists included in Appendix 1.

3.2.5. Summary

In summary, the elements of SCED outlined above include: appropriate guiding principles and a planning process that identifies community needs and aspirations, engages in meaningful public participation, assesses the impacts of proposed strategies in an integrated manner, and ultimately results in a plan that is implemented and monitored. A host of pre-existing community conditions help determine the success or failure of CED initiatives. A framework for SCED, therefore, can be illustrated as follows:

. Needs Vision Values/Principles

Figure 5 SCED framework

3.3 Fisheries Co-Management and SCED in Fishing Communities

The following section describes unique characteristics of Canadian fishing communities and the challenges they present for SCED. One particularly difficult and important challenge is sustainable management of the natural resources upon which these communities depend. Sustainable management of fisheries is exceedingly difficult, as the collapse of fish stocks around the world demonstrate. Requirements for applying the objectives of sustainable development within the fishery are discussed below, in particular one strategy which offers promise for addressing the dual objectives of sustainable resources and sustainable communities - fisheries co-management. As with SCED, a framework of principles, process steps and conditions for success is developed.

3.3 1. Canadian Fishing Communities

Literature relating to CED in Canadian fishing communities is relatively sparse. Authors such as Copes (1971) and Shrank (1997) have written about the viability of fishing communities, arguing that many fishing communities on Canada's Atlantic coast are not sustainable. With the well-publicized "crash" of the Atlantic cod fishery, communities on the east coast of Canada garnered considerable research interest. However, the focus of this literature has been oriented more towards the nature and plight of Atlantic communities, along with the government policies and aid programs offered as a result, than the efforts of these communities to sustain and recreate themselves.

References examined during the research included studies by: Department of Fisheries and Oceans (Poetschke, 1983) and the Task Force on Atlantic Fisheries (Kirby, 1982) describing community dependence on fishing in the Atlantic provinces; Mount Allison University's Rural and Small Town Research and Studies Programme (1991 a, b) presenting a profile of displaced fish plant workers in two Nova Scotia communities; and another by RSTRSP (1996) describing the successes and failures of the "relief" programs instituted by senior governments after the cod crash. Schrank (1997) comments further on the ineffectiveness of these programs. Woodrow (1996) discusses sense of community, commitment to the fishery, attitudes towards and awareness of changing fishing conditions. The work of researchers participating in Memorial University's Eco-Research project on "Sustainability in a Changing Cold-Ocean Coastal Environment" and Ommer and Sinclair's (1996) investigation of the informal economy in Newfoundland was examined, along with Kealey's commentary on the "mega-project" mode of development (eg. Hibernia) utilized in the past to help sustain Newfoundland (Muzychka, 1996).

Reports of organizations and initiatives such as the Coalition for Fisheries Survival (Memorial University, 1990) and the Partnership on Sustainable Coastal Communities and Marine Ecosystems in Newfoundland (1995) make recommendations for improved fisheries management on Canada's eastern coast. These include the establishment of co-management arrangements, with the aim of moving toward sustainability of the fishery and fishing communities. Local CED efforts, however, have generally not been examined. Exceptions include: P. Sinclair's description of the Great Northern Peninsula Development Corporation's efforts (1989); sources referring to the cooperatives of Evangeline, Prince Edward Island (e.g. Jackson and Pierce, 1990); and the Report of the Commission on Employment and Unemployment in Newfoundland (1986).

CED in British Columbia's fishing dependent communities has received even less attention in both academic and government literature than in the east coast, despite vast changes taking place in BC's fishing industry and, as a result, in local fishing economies. A limited number of government and industry supported publications have addressed coastal community reliance on the fishery and potential areas for fisheries development on a coast-wide basis (e.g. Sinclair, 1971; Millerd and Nichol, 1994; Gislason et al, 1996). A more substantial body of literature exists about the relationship between First Nations and BC's fisheries resources than about fishing communities in general (e.g. Newell, 1993; Cassidy and Dale, 1988; Scow, 1987; Knight, 1978). While this literature includes publications on BC First Nations' involvement in fisheries co-management, it is predominately concerned with legal and land claims questions, historical and anthropological accounts of the fishery's importance, and even political organization with respect to the fishery.

William Sinclair's federally-initiated study The Importance of the Commercial Fishing Industry to Selected Remote Coastal Communities of British Columbia (1971) is one of few attempts to establish the relationship between British Columbia fisheries, the economies of coastal communities and economic well-being of their residents. Sinclair (1971; 7) points out that the salmon fishery "played a very important role in helping to establish British Columbia's coastal communities" and described several community characteristics. Marchak et al. (1987) build on Sinclair's work, adding that even today the fishery provides a livelihood for residents of coastal communities with few or no economic alternatives. These more isolated communities are more vulnerable to changes in fisheries policy than urban-based fishermen.

Millerd and Nichol (1994) provide an in-depth look at the fish processing aspect of BC's fishing industry, the important role the fishery has had in defining the lifestyle and livelihood of BC coastal communities and the inherent competitive disadvantages of small, remote fishing communities. Another important, provincially-commissioned study provides insight into the reliance of BC coastal communities on the salmon fishery in the 1990s. Fishing for Answers (Gislason et al., 1996) predicted the impacts rationalization of the BC salmon fleet would have on these communities, explored potential transition and adjustment support mechanisms, and provided a refinement of available data that resulted in "a much better community and aboriginal profile of the salmon fleet than had previously existed" (S-6). The report also made several recommendations on how senior governments could help ease the pain of economic restructuring in impacted communities, including a "bottom-up" approach. In a follow-up report, Fishing for Direction, Gislason et al. (1998) elaborate on economic development issues and needs for BC fishing communities.

In addition to data provided through the Gislason report and other government sources (e.g. the Census, DFO) there are some communities, including Prince Rupert and the Sunshine Coast, that have taken the initiative to demonstrate the importance of the fishery to their local economy through locally-commissioned studies (e.g. Eidsvik & Associates, 1997). Finally, proceedings from various public forums and workshops on fisheries held in BC coastal communities also document local concerns about status of the stocks and fisheries management, calls for increased community participation in fisheries management in BC, and concern about the viability of fishing-dependent communities (e.g. Gallaugher et al, 1996; Gallaugher, 1997; Vodden and Gallaugher, 1997; Coastal Community Network, 1993-1997). These proceedings

provide an outline of various CED and fisheries co-management initiatives taking place in BC but do not provide detailed information or analysis.

In terms of looking at the fishery as part of a broader local economy, and at fisheries development as a component of a broader SCED strategy within fishing-based communities, within the literature and public discussion regarding coastal community viability there is a tendency to focus on the possibility of enhancing BC's fish stocks or of obtaining more value from BC's marine resources. There is limited discussion on opportunities, however limited they may be, for economic diversification outside of the fishery. For some there is a belief that if the resource can be sustained so will coastal communities, overlooking the necessity/importance of employment outside of the fishery and the relationships between employment alternatives and resource health (e.g. Memorial University, 1990). Some authors, however, recognize the need for diversification within and outside the fishery. Muzychka (1996), for example, observes of the East Coast situation that Newfoundland will not be rebuilt on the back of one resource (cod).

In summary, the literature on fishing communities in Canada provides insight into the unique situation in which fishing-dependent communities find themselves and, therefore, the unique set of considerations that must be taken into account when planning and implementing CED strategies in this setting. One of these considerations is fisheries management methods and policy; how decisions are made about who harvests fisheries resources and at what levels, for example. The need to ensure sustainable harvest levels creates difficult information and monitoring requirements. Further considerations include: technological innovation, aimed at increasing efficiency rather than employment; global competition, particularly from lower-cost staple regions; public and political pressure. In addition, the fishing labour force is accustomed to high earnings and is at a competitive disadvantage in the non-fishing labour market due to age and education levels. Historical dependence and resistance to change in communities whose identity and culture has been built upon a lifestyle associated with resource extraction can discourage diversification efforts, and, finally, adding value to primary resources in regions isolated from major market centres presents difficult challenges (e.g. meeting infrastructure, transportation, supplier, and labour force training needs). At the same time, however, sense of community and determination to survive is high, residents are accustomed to having to adapt and rely on multiple income sources, and the informal economy, while threatened, has been sustained and helps community members through bad times. Common characteristics of Canadian fishing communities, as described in the literature, are summarized in Table 6 below.

It should be noted, however, that significant differences exist between fishing communities on Canada's east and west coasts. The primary species harvested, for example, are not the same. Biological characteristics and management practices differ accordingly. In BC the wild salmon fishery has, until recently, been the mainstay of the fishing industry, while the Newfoundland fishery has relied upon Atlantic cod. Atlantic provinces are more economically dependent on the fishery than the province of British Columbia. Therefore, issues facing fishing communities are considered to be of greater political importance (Parsons, 1993).

Further, there are many more fishing communities and fish processing plants on the east coast than in BC. Poetschke (1983) identified 1,342 fishing communities in Atlantic Canada while Gislason et al. (1996) list only an estimated 50 BC fishing communities. Of these, 27 were dependent on fishing for 10% or more of community employment. Only 11 (22%) are "single sector", defined by Poetschke as 15% or more of the population employed in the fishing sector. By comparison 40%, or 537 communities, fit this description in Atlantic Canada. Approximately 447 Atlantic communities have fish processing plants. In contrast, Millerd and Nichol (1994) point out that by 1990 the number of canneries coast-wide in BC had been reduced from 50 to six. Only three of these were located in communities outside of the City of Vancouver.

Sinclair (1971) points out further that even within BC, fishing communities are not homogeneous. Ranging from urban villages to remote First Nations reserves and from diversified to highly dependent economies, each exhibits the characteristics described in Table 6 to varying degrees.

Table 6 Characteristics of Canadian fishing communities

Small populations
Historic connection to, and reliance on, the fishery and marine resources
Older, less educated labour force relative to provincial/national levels

Preference for fishing as a way of life
Lack of knowledge and information (e.g. about alternative job opportunities and government programs) due to geographic and social isolation
Subject to economic fluctuations related to changes in ecological conditions and fish populations, regulation, global competition, price changes etc.
Insulated from economic fluctuations by unemployment insurance
Dependent on government assistance (e.g. EI, relief programs)
Workers have historically sought employment in sectors other than the fishery throughout the year
Important but threatened base of informal economic activity
Tendency for economies to diversify over time (although fishery remains important)
Loss of fish plants and young people from communities
Inadequate infrastructure for industrial development
Transportation barriers and associated cost increases for local businesses
Substantial local energy, skills, knowledge and sense of community
Inadequate social and psychological services to deal with job loss
Growing aquaculture industry
Demand for increased local involvement in fisheries management and decision making
Developing organizational infrastructure for community and regional development (in part due to responsibilities given for delivering government programs), however, organizations lack human resources, finances, expertise and political clout

Sources: Poetschke, 1983; RSTRSP, 1991a, 1991b, 1996; Schrank, 1997; Woodrow, 1996; Ommer and Sinclair, 1996; Muzychka, 1996; Memorial University, 1990; Commission on Employment and Unemployment in Newfoundland, 1986; Sinclair, 1971; Copes, 1972; Millerd and Nichol, 1994; Gislason et al., 1996, 1998; Gallaugher et al., 1996; Gallaugher, 1997; Vodden and Gallaugher, 1997; Coastal Community Network, 1993-1997; Marchak et al., 1987; Kirby, 1982

While a review of the literature provides valuable background information on the context for SCED in Canadian fishing communities, little has been written about how SCED strategies, principles and recommended process steps might apply, or have been applied, in this setting.

3.3.2. Principles for Sustainable Fisheries Development

The "combination of history and complexity make the fishery an ideal case study for those concerned with questions of sustainable development."

A.T. Charles, 1994; 201

Many authors have addressed the requirements of sustainable development within the fishery. In fact, Charles (1994; 202) points out that natural resource management has developed into a "science of sustainability". Most researchers and managers, however, have not focused on

both community and resource sustainability. Charles describes an evolution of fisheries management that began with conservation concerns (biological sustainability) and then, beginning in the 1950s, added economic efficiency to management objectives. The chief goal of fisheries managers shifted from Maximum Sustainable Yield (MSY) to maximizing resource rent from the fishery or Maximum Economic Yield (MEY). The "social/community paradigm", however, has received little attention. A new approach is needed that takes ecological, economic and community concerns into account. Charles refers to this as Optimum Sustainable Yield (OSY).

The lack of socio-economic information on coastal community economies provides evidence to support Charles' claim that while fisheries managers have taken biological and economic aspects of sustainability into account, social considerations have been virtually ignored. Poetschke (1981; 1), an employee of the DFO Economic Policy Branch, elaborates: "The Canadian government makes numerous decisions and sets many policies that affect Canadian communities ...The collection and analysis of data on fishing communities is one prerequisite of a sound fisheries policy. However, the data analyzed usually refer only to larger communities; hence the government often makes decisions without a full assessment of the situation." As further, more recent evidence others point to the fact that no attempt was made by the federal fisheries Department to predict and plan for social and community impacts of the Pacific Salmon Revitalization Strategy before its implementation (Gallaugher et al., 1997).

As the trend towards environmental certification of natural resource industries progresses, various agencies as well as researchers have worked to define the essential characteristics of, and guidelines for, sustainable resource management. Charles recommends five policy directions for sustainable fisheries development: 1) living with uncertainty; 2) coping with complexity; 3) local control; 4) appropriate property rights; and 5) fishery planning and economic diversification. A review of the principles for sustainable fisheries identified by Charles (1994), The Marine Stewardship Council Initiative (1996) and others is summarized in Table 7 below.

Many of these principles are shared directly with those of SCED. Some reflect a more specific version of some broader SCED principle. Others appear to be unique to the fisheries and resource management literature. Further examination of these principles, however, also reveals links to SCED. For example, although an effective management system is extremely important to sustainable fisheries, so is an ongoing program of strategic planning, action and monitoring (management) in CED. Similarly, although our limited knowledge of complex aquatic ecosystems and the fisheries resources within them makes a precautionary, anticipatory/ proactive approach vital for sustainability in fisheries management one can also say the same for CED generally. Precautionary steps must be taken in all development, anticipating the impacts whether it be of fisheries or tourism, if ecosystem integrity, a shared and fundamental principle, of both SCED and sustainable fisheries is to be maintained. Gardner (1988; 6) notes that anticipation and prevention, monitoring and self-regulation "permits the seeking, testing and redesigning of goals, and helps managers respond to surprise and discontinuous change in ways that promote sustainability". Therefore, the precautionary/anticipatory principle is not unique to fisheries but instead should be added to those listed for SCED.

Table 7 Principles of Sustainable Fisheries Management

Restoration and maintenance of natural capital (sustainable incomes and ecological integrity)
Ecosystem approach
Rights of adjacency and historic dependence (encompassing Charles' local control)
Intergenerational equity (providing for today while retaining options for tomorrow)
Precautionary and anticipatory approach (recognizes complexity)
Integrated
Full cost pricing (includes management, environmental and social costs)
Efficient resource use (maximum value obtained, avoids waste)
Diversity (cultural, biological, economic)

Economic viability
Participatory
Responsive, adaptive and effective planning and management
Cooperative (i.e. between stakeholders, harvesters, government, scientists)
Linking scientific and local and traditional ecological / fish harvester knowledge
Equity and fairness in sharing of costs, benefits and responsibilities

Sources: Charles (1994); Pinkerton (1995); Marine Stewardship Council Initiative (1996); Canadian Council of Professional Fish Harvesters (1997); Harvey and Coon (1997); Canadian Code of Conduct for Responsible Fishing Operations (1998)

The principle of integration is also shared with SCED. It is widely discussed in the literature that sustainable resource management, including fisheries, should be integrated; taking a multi-resource, ecosystem approach; employing multiple means and strategies; using resource management as a mechanism for positive social and economic change; and involving accommodation and compromise (Mitchell, 1989; Sadler, 1986). According to Mitchell (1986; 4) "... the ultimate goal in managing and developing resources is to improve the quality of life of the people in the region while maintaining the integrity of the environment. In this context 'integration' involves relating resource management to management of other societal concerns ranging from job opportunities to housing and regional transportation."

The concept of full cost pricing is linked to that of integration. A pricing system should recognize, it is argued, the full range of costs, ecological, economic and social, incurred in the harvesting and production of a fisheries product. This includes management costs. Thus, full cost pricing is also related to the principle of economic viability. In both CED and fisheries management methods of ensuring the economic viability of not only harvesting or development initiatives must be ensured, but also of the planning and management process itself. Similarly, the principle of capturing maximum benefits from a natural resource is linked to broader imperatives of economic viability and ecological sustainability. Given an increasing worldwide population, natural resources must be used to their maximum benefit if society is to achieve the dual objectives of keeping harvests to sustainable levels while meeting demands for their use. One important method of minimizing waste in the fishery is minimizing by-catch of non-target species.

The principle of rights of adjacency and historic dependence recognizes that historically communities had de facto rights to resources based on their proximity to them. The Report of the Partnership on Sustainable Coastal Communities and Marine Ecosystems in Newfoundland and Labrador (Newfoundland and Labrador Round Table on the Environment and the Economy, 1995), for example, recommended that the principles of adjacency be honoured and that first preference to resources in fishery allocation decisions should go to those communities with a historical claim. Implicit in this is the importance of recognizing Aboriginal rights, land claims and fiduciary obligations to Native peoples. Harvey and Coon (1997) add that historic dependence is social and cultural as well as economic. Ultimately the adjacency principle relates to the SCED principles of equity and social justice and recognition of the importance of the informal economy (fisheries as a means of sustenance for those who live near to fisheries resources).

3.3.3 Challenges in Sustainable Fisheries Management

Resource management is a complex and challenging task. Rees (1990; i) describes it as a set of "complex interactions between economic forces, administrative structures and political institutions." Pierce (1995) identifies four specific challenges to achieving sustainability and conservation in resource management: the market problem; the people problem; policy and institutional pitfalls; and property rights.

The market problem stems from the fact that market economies are imperfect and do not internalize true costs. By attempting to take social and environmental costs into account during the decision-making process the market problem can, in part, be addressed. Policy and institutional pitfalls can include an unwillingness of resource managers to: a) put the necessary time and resources into comprehensive, participatory planning; and b) give up responsibility or authority (Mitchell, 1986). Another challenge related to both market and policy pitfalls is the increasing influence of transnational corporations and free trade agreements, resulting in decreased ability of local, provincial and federal policymakers to affect economic change. Further, pressure for governments to accept social and environmental concessions to maintain economic benefits has been increased (Feagan, 1993; Hudson and Plum, 1984).

The people problem is also a complex one. Resource management is a "dynamic trade-off process" (Rees, 1990; i). Conflict is inherent in

resource allocation, where competing interests vie for a share of a limited resource base. Further, scarcity breeds conflict at a time when cooperation is most needed. Dorcey (1986) identifies four types of conflict: cognitive (different understandings of a situation); value conflict (different objectives); interest conflict (different opinions regarding the distribution of costs and benefits); and behavioural conflict (personalities and circumstances, e.g. historical mistrust). Each of these four conflict types can be seen within the BC fishery, representing a difficult challenge in meeting the "cooperative" principle of sustainable fisheries. Resolution of conflicts between competing interests is key to effective resource management and to creating accepted, implementable management decisions (Mitchell, 1989). Because the resolution of this conflict in a pluralistic bargaining process is viewed to represent a synthesis of views and, therefore, the public interest some authors argue that this conflict is not only inevitable but desirable (Wengert, 1955; Mitchell, 1989). Others qualify this by stating that the public interest is only represented when a broad range of interests are represented in the bargaining process, including local and outside interests (Bryant, 1999), thus the trend towards stakeholder participation and co-management of natural resources (discussed further below).

Unpredictability

Another aspect of the people problem is that humans: a) make mistakes; and b) lack information and understanding about environmental and social systems. Both Rees and Pierce fail to make specific reference to the "resource problem". That is, ecosystems are complex and in a constant state of change. Wilson et al. (1994) describe the fishery as "chaotic" in nature. Natural swings of a given population, and even crashes or collapses over time, are common for example. The challenge for resource managers is to design information systems to capture the best possible information about changes in the natural environment as they occur and to be flexible enough to adapt management strategies accordingly. Wilson et al. argue that this will require a decentralized, co-management approach that takes into account local ecological knowledge as well as mainstream science.

Property Rights

Charles (1992) discusses four types of fisheries conflicts. Two of these relate to allocation of marine resources. Conflict arises both over the allocation of fisheries resources themselves, as well between fish harvesters and advocates of fish protection and other competing users of the marine environment. Other types of conflict involve arguments over how the fishery is managed (management mechanisms and objectives) and who has control over management decision-making. Allocation issues arise because, in most cases, marine resources are scarce - insufficient to meet all of the demands users place on them (Parsons, 1993). These issues are generally resolved by resource managers through the assignment of rights of access to the resource, or "property rights", to the various resource users.

The importance of access and property rights (a claim on the benefit streams associated with a resource) in the fishery relates to the "common property", and in some cases even open access (absence of property rights or obligations), nature of many fisheries resources (Hardin, 1968). While many economists and resource managers view common property as problematic, pointing to cases of market failure and over-harvesting, examples of these problems can also be found in privatized systems such as Individual Transferable Quotas (Copes, 1986, 1997).

In fact, the conditions of common or shared access (includes communal and other "intermediate property rights" arrangements) create opportunities for the application of SCED principles such as collaboration and broad-based public involvement (Berkes, 1989). Pierce (1995) goes so far as to say that property rights can be an obstacle to conservation. He notes that once property rights are assumed attempts to reduce production in the interests of conservation are politically sensitive and require payment of compensation, even if the rights to harvest were not originally purchased. Figure 6 depicts the range of property rights that are possible in the fishery.

I_____I_____I_____I

Private State Common Open

Property Property Property Access

Source: Pierce (1995)

Figure 6 Continuum of fisheries property rights

Under a common property regime, stakeholders who have a recognized interest but are not directly involved in fish harvesting, such as conservationists, community development agencies and local governments, may play a role in managing the fishery, collaborating with harvesters and managers. In contrast, privatized models typically involve only the latter two interests. Both types of arrangements can be considered "co-management". However, government-industry partnerships leave out other fisheries stakeholders. If the public interest is to be met by achieving a synthesis of opinions among all stakeholders, as Mitchell (1989) would argue, then co-management arrangements are needed that include a much broader range of interests. By adopting this type of co-management system, the sustainable fisheries principles of participation and cooperation can be followed.

The success factors of sustainable fisheries management are summarized in Table 8 as follows:

Table 8 Success factors for sustainable fisheries management

Ability to internalize true costs
Willingness of resource managers to invest adequate time and resources in planning
Willingness of resource managers to share responsibility and authority
Ability of local, provincial, and national players to affect change in a global trade environment
Ability to resolve conflict/reach agreement among competing interests
Ability to gather and analyze adequate information about environmental and social systems impacted by resource management decisions
Co-management arrangements involving a broad range of stakeholders

Sources: Bryant, 1999; Charles, 1992; Mitchell, 1986; 1989; Pierce, 1995; Wilson et al., 1994; Rees, 1990.

Co-management, therefore, is an important component of sustainable fisheries management with the ability to help address several other management requirements, including resolution of conflict at the local level and the ability to gather and analyze information about environmental and social systems. However, it is also clear that co-management is only one of several factors that must be taken into account.

3.3.4. Co-management: A SCED Strategy for Fishing Communities?

The Literature

The literature on fisheries co-management is relatively well-developed and falls within the general area of common property management theory (Jentoft, 1985; 1989; McCay, 1989; Pinkerton, 1989; Berkes, 1989; Pomeroy; 1994). Writers in the fields of public participation, conflict resolution, environmental mediation and shared decision-making have also made contributions to the discussion on co-management of natural resources, including fisheries. Because co-management involves a degree of decentralization and an increased role for communities and regions, it is also has theoretical roots in bioregionalism and social ecology literature (Feagan, 1993; Sale in Eckersley, 1992; Johnston, 1986). Within the literature on co-management authors have considered the experiences of communities, states and nations across the globe. Like the CED literature, authors on the subject of co-management have focused primarily on case studies and concepts (Berkes, 1996). It is from these works that the benefits, strategies, principles, and success factors of co-management discussed below have been drawn.

Benefits of Co-management

Community involvement in resource management can have a range of benefits, including both practical benefits for resource managers and

community development benefits for resource communities. Gale (1996) points out that the involvement of local communities and other stakeholders in resource planning and decision-making can lead to:

- better and more informed decisions (provides a forum for advice and input);
- increased stakeholder commitment to implementation and enforcement (sense of shared responsibility);
- resolution of differing points of view early on in the process (anticipatory vs. reactionary) resulting in reduced conflict and uncertainty over resource use; and
- increased public awareness and understanding.

Like SCED, co-management is a strategy for addressing the trend toward centralization with decentralized decision-making. Fisheries centralization has lead to enormous capital investment, fleet overcapacity and fish stock collapse (Brown, 1997). As described above, it has also resulted in enormous social and economic costs in remote coastal communities as processing of fish products moved to larger centers and the hinterlands became mere sources of raw material for an increasingly urban population. Amend (1997) cites the Southern Southeast Regional Aquaculture Association in Alaska as an example of how, through co-management arrangements, fishermen and community members have prevented corporate concentration in the fishery. By forming regional associations fishermen: launched an extensive enhancement program; formed regional plans and harvest targets together with state officials; gained input into the policy-making process; began custom processing and marketing their own fish; formed a marketing council; developed value-added products; and improved their quality control.

A review of the co-management literature demonstrates that co-management can also encourage and facilitate resource conservation. In many cases fishermen are willing to place restrictions on themselves and undertake conservation programs which they consider legitimate and when they have played a integral part in project planning and design (e.g. South Africa, Philippines). Voluntary compliance and cooperation in management will not be obtained, however, without adequate public consultation and opportunities for input in project design and implementation (Vodden et al., 1997).

Further, co-management appears to be a promising CED strategy for fishing communities who are victims of management decisions made far from their communities and the fisheries resource, particularly when co-management initiatives are placed within a more comprehensive SCED framework. Berkes (1989), Pinkerton (1995) and others refer to co-management as a community development tool and provide examples that demonstrate how co-management can empower and build capacity among local citizens and organizations, result in more locally appropriate decisions and facilitate stewardship activities. Case studies further demonstrate that community members are likely to bring objectives such as sustainable employment and quality of life to the negotiating table, along with the more traditional resource management goals of economic viability for the industry and appropriate levels of harvest.

Principles of Co-management

Principles shared with SCED, such as ecological sustainability, capacity building and social equity, in addition to the central values of citizen participation and collaboration, are identified throughout the co-management literature. Because co-management is a particular form of fisheries management, fisheries that are managed sustainably and cooperatively also share each of the principles for sustainable fisheries listed above (Table 7). Fisheries co-management activities with CED objectives (or alternately SCED programs with a fisheries co-management component) draw upon the principles of both sustainable fisheries and SCED (see Figure 7).

Resource management is a decision-making process (O'Riordan, 1971). In co-management the process of arriving at resource management decisions is extremely important. A key challenge is to find ways that a number of individuals, representing a range of unique interests, can arrive at an accepted decision (or ongoing series of management decisions), thus addressing the "people problem" (Pierce, 1995). The process of making decisions and negotiating between interests may be very formal (e.g. in the form of legally binding agreements) (Savoie et al., 1999). Pinkerton (1995) points out, however, that some community-based or co-managed fisheries are governed by informal rather than formal arrangements.

Sustainable fisheries SCED

Restoration/maintenance of natural capital Living within ecological limits

Ecosystem approach Stewardship

Rights of adjacency and historic dependence Self-reliance/community control

Intergenerational equity Equity and social justice

Equity and fairness in sharing costs, Collective benefits

benefits and responsibilities Community building/mutuality

Integrated Broad-based public involvement

Participatory Integration

Full cost pricing Qualitative development

Economic viability Economic viability

Efficient resource use Entrepreneurialism

Diversity Diversity

Cooperative Collaboration

Responsive, effective planning and management Long term planning and action

Precautionary, anticipatory approach Recognizes informal economy

Linking scientific and local knowledge Capacity building

Integrity of representation

Integrity of process

Adherence to the principles of sustainable fisheries

Figure 7 Overlapping principles of SCED, sustainable fisheries and co-management

When beginning a co-management process it is not uncommon that participants agree upon a set of process-oriented principles that will help guide them throughout their deliberations, including principles that provide guidelines for effective and adequate representation. A list of process principles for co-management has, therefore, been derived (see Table 9). These principles are based on the assumption that a genuine and extensive consultation process is planned that entails a degree of shared decision-making and some ongoing involvement for participants (e.g. not just providing information or providing a one time opportunity for input). Many of them apply not only to the process of fisheries co-management but of CED planning as well.

Table 9 Principles of fisheries co-management and community-based processes

Integrity of Representation
Broad-based participation/inclusive
Appropriate and balanced/equitable representation
Central role for fish harvesters
Community involvement and local stewardship
Capacity-building, education
Voluntary participation
Accountability
Integrity of Process
Sharing and delegation of authority
Balanced distribution of rights and responsibilities
Respect for other participants
Communication
Clarity
Integration of local knowledge and science
Honesty, openness and transparency
Realism
Purpose driven (efficient and action-oriented)
Consensus-based
Self-design
Incrementalism
Flexibility and feedback loops
Monitoring of results

Sources: Gallaugher et al., 1997; Gale, 1996; National Round Table, 1993; Pinkerton, 1997b; Canadian Council of Professional Fish Harvestors, 1997; Coastal Communities Network, 1997; Vodden et al., 1997 a and b; Mitchell, 1986

Stakeholder Roles and Responsibilities

In addition to process principles, as in CED, a number of specific strategies and techniques for fisheries co-management can be found in the literature. Tasks that fishermen as well as fishing and community organizations may choose to take on within a co-management arrangement

range from long term planning and system design to allocation, research and public education and habitat restoration (Pinkerton, 1997b). Strategies or types of co-management activities are listed in Table 10 below.

Table 10 Co-management strategies

Stock assessment
Habitat assessment and monitoring
Habitat protection, restoration and enhancement
Stock enhancement (e.g. hatchery management)
Enforcement of harvesting
Setting harvest targets
Deciding on time and area of openings
Allocation/licensing
Product marketing
Policy making
Education/communication

The range of possible activities can also be divided along the lines of policy-making (strategic planning) and management (operational decisions and actions) (Farlinger, 1997).

The level of public involvement in fisheries management and policy making is determined by the degree to which power is shared or delegated by the traditional management authority, by the issues participants have agreed to address, and by the tasks they are willing to take on. The degrees of public and stakeholder involvement are reflected in Arnstein's (1969) ladder of participation and can be classified under four categories: 1) information/education; 2) consultation; 3) shared decision making; and 4) shared management responsibility/delegated authority. Criteria for determining the appropriate level of public involvement include: the need for public commitment; the level of conflict; the nature and complexity of the issues; public interest, time and resource constraints; and number of interested parties (CORE, 1995). Only participation categories three and four can be considered co-management.

Conditions Contributing to Success or Failure

Fisheries co-management initiatives tend to be successful when geographical boundaries are defined. For example, shellfish beds are easier to co-manage than migratory species like tuna or salmon. Another condition contributing to success is where there are traditional fisheries, where fishermen and or communities have an historic role in stewardship and where traditional authority remains strong, thus increasing compliance and enforcement effectiveness. Legitimate representation is also key. The existence of organizations such as community councils, fishermen's unions or cooperatives can be extremely helpful, providing an avenue for appropriate legitimate representation and facilitating the process of organizing interests and seeking appropriate representation.

Homogeneous communities with cultural or kinship ties over and above simple geographic location are, in general, more amenable to cooperative endeavour. A limited number of interest groups also makes cooperation a great deal easier (Rees, 1990). The examples of Japan and BC are illustrative. Japanese fishing communities are homogeneous, with fisheries ownership and management systems that go back to feudal times (Kalland, 1981). In contrast, BC has, over the last 150 years, seen its Aboriginal fisheries replaced with a modern industrial fishery. In the case of salmon, three commercial gear types compete for catch share. Added to this are constant conflicts between commercial and

sport allocation and Aboriginal entitlement. Local community interests are at odds with large, mobile mostly corporately owned harvest units. International tensions over migratory stocks add to the complexity.

As in other CED initiatives and processes, the role of the community leader (the person who liaises with the community during the process and serves a local coordinating function) is key. O'Riordan (1976; 65) points out that " Above all the significance of specific personalities should be emphasized; resource decision making is not so much about organization, statutory guidelines and coordinating arrangements, as it is about the outcome of the skill, determination, vision, or indifference, antagonism and bloody-mindedness of particular individuals in important positions with influential connections." As with CED the power and influence of the elite must be considered, along with the abilities of the leaders or change agents who are taking a key role in guiding the co-management process at the local level. Such leaders must be able to relate to fishermen, large and small, regulators and scientists alike. If the person is brought in by an outside agency to initiate or co-ordinate a co-management system or initiative it may take months to develop a level of trust before any action, even organizing of community meetings, can take place (McManus, 1996). Burkey (1993) recommends at least a three month training program for such leaders or "change agents", as well as the establishment of networks (e.g. with other communities) and other forms of support. Pomeroy (1989) recommends that fisheries co-management leaders brought in from outside accompany fishers and fish buyers as they do their work, assisting where possible.

Just as a central role for fish harvesters must be recognized in any public involvement process concerning fisheries, the role of various levels government is also key. Decisions that require government action should involve the participation of the appropriate authorities (National Round Table, 1993). In fact, governments often maintain an overseer and/or coordinating role in a co-management system (e.g. facilitating the organization of local development organizations, mediating disputes). In British Columbia even by community leaders and other industry stakeholders suggest there should be a continuing role for both provincial and federal governments (Gallaugher et al., 1996; Gallaugher, 1997). A commitment from decision-makers and key actors to act on input received is a key ingredient of success. As a minimum this should mean that senior staff with decision-making capacity will become and remain involved. The consultation process should lead to program and implementation funding or in-kind support in the short to medium term.

Bureaucratic or political resistance, possibly due to a perceived threat to existing powers can be a major stumbling block to co-management efforts. Mitchell (1986; 11) explains further: "Existing agencies have little incentive to give up responsibility or authority; they will remain as a fundamental barrier to any initiative which seeks to reduce the scope of their influence or power. Perhaps one reason for the shortcomings of comprehensive resource management in Canada has been the unwillingness to create coordinating mechanisms with actual power." Finally, specific policies and legislation put in place to formalize co-management arrangements can be helpful in clarity of objectives, longevity and government commitment in the long term.

In the end, however, the only real guarantee of commitment to a cooperative regime is that all parties continue to believe that their interests are better served within the system than by opting out. Put another way, that the benefits from participation and compliance exceed costs (Vodden et al., 1997b). Frequently co-management responsibilities are taken on in exchange for rights to participate in decision-making and to benefit from resource access. Balancing rights and responsibilities is critical to ensure the ongoing participation of all parties to the co-management agreement or process. Pinkerton (1997) emphasizes the importance of this tradeoff, stating that society must change their values to accept that property rights are not only a license to extract benefits, but also carry with them the obligation to restore and protect the resource.

Challenges in Co-management and Community Participation

Experience has shown that there are a significant number of challenges to successful of public participation in resource management. The first challenge is the tendency for consultation to be costly (in terms of time and money). Meeting basic funding requirements was identified as a key challenge for local BC Round Tables, for example (Mitchell, 1994). However, upfront public participation can cost less than alternatives such as court battles and blockades (Gunton and Flynn, 1992). Unfortunately, most governments are cautious about what can be perceived as new, ongoing funding commitments, commonly referred to as "black holes." There is no evidence that government has the ability to weigh the costs of not acting. As an example, the Canadian Atlantic Groundfish Strategy (TAGS) has cost taxpayers $1.9bn in mitigation of community impact from the collapse of the northern cod (Vodden et al., 1997b).

Another challenge is striving for a balance in representation. A related concern is building and developing community institutions and mechanisms for legitimate representation, particularly where they do not already exist (Renard, 1991). Attempting to represent the interests of the general public can be especially difficult. Educating and gaining the support of the non-active public is another challenge faced in CED and resource management. Mitchell (1989) points out that O'Riordan (1971c; 102-3) has categorized the public in two groups - the active and the inactive. Active participants are the ones most often heard from by resource managers since they are organized and articulate. He further classifies active participants as either: a) ideological actors, who participate because of a concern about principles, intellectual and/or moral positions; b) civic actors, who are concerned with specific issues that impact their community or region; and c) private actors who are

concerned about the personal impact of policy and/or management decisions. The non-active public is classified as either fatalistic; unaffected; or unaware. Since the non-active public represent the majority of citizens their opinions are important, however, "most mechanisms for citizen involvement are mainly oriented toward the active public" (Mitchell, 1989; 278). It is argued by some that elected officials best represent those who are considered the non-active public and may do little else in their civic lives except vote on election day.

There are a number of specific factors that can prevent potential participants from getting involved and therefore prevent adequate representation in a public or stakeholder involvement process (Dovetail Consulting, 1994). These include:

- work or family commitments during meeting times
- inaccessible meeting locations
- notice of meetings not received or not received with adequate lead time
- no one is available to respond to requests for more information
- people feel ignorant, that their opinions will not be respected or valued
- people feel intimidated by the process, by having to participate in groups or speak in
- public
- belief that a decision has already been made and their input will have no impact
- belief that special interests will dominate the process
- people are not able to speak or read the language

Others challenges include: building credibility in the community and recognition from government (e.g. by showing concrete benefits); learning to work together in the face of conflict, often exacerbated by resource scarcity; and educating participants so that they are informed decision-makers. The need to supplement local input with rigorous science must be recognized. Finally, it must be recognized that not all matters affecting any fisheries resource can be dealt with within a co-management process. External factors come into play such as outside users, pollution and natural forces (e.g. weather).

The challenges and factors of successful co-management are summarized in Table 11 below. As with SCED, a good process for planning and implementing co-management strategies and initiatives is another important success factor. Such a process can also help to overcome or minimize others barriers (e.g. conflict). Recommended process steps for co-management are outlined in Appendix 5.

Table 11 Factors in the success of co-management efforts

Success factors
Management area geographically defined (with some clarity and consensus)
Traditional role of community in stewardship
Strong traditional authority (leadership)
Existence of avenues for legitimate representation (e.g. organizational infrastructure)
Homogeneous community
Limited number of interest groups so as not to make the process unwieldy
Commitment from decision-makers and key actors including follow up/implementation support
Specific policies and/or legislation

People buy-in, feel they are benefiting more than paying
Challenges
Cost (time and money)
Balanced representation
Power and influence of the elite/established structure
Building credibility in the community and with government (measurable results)
Learning to work together in the face of conflict
Educating and training participants
Process design (e.g. accommodating participants' needs to ensure participation)
Volunteer burnout and lack of volunteer and human resources
Downloading without support for capacity building
Resource access

Sources: Rees, 1990; O'Riordan, 1976; McManus, 1996; Burkey, 1993; Pomeroy, 1989; National Round Table, 1993; Gallaugher et al., 1996; Gallaugher, 1997; Mitchell, 1986; Vodden et al., 1997b; Pinkerton, 1997; Mitchell, 1994; Renard, 1991; Dovetail Consulting, 1994; Pinkerton and Weinstein, 1995

Co-management and the BC Fishery

While British Columbia is considered by many to be on the leading edge of the movement towards participatory resource planning, our experience has been a relatively recent one. In fact, decentralized resource management decision-making has not been the normal practice in British Columbia in the past. With recent downturns in the forest and fishing industries, however, the level of frustration in many resource communities has increased (Gallaugher et al, 1996). As a result, many British Columbians have been demanding increased public involvement in virtually all aspects of community and regional planning, including resource and land use. Further, as governments seek ways to share the costs of resource management with resource users and to calm the political volatility associated with resource conflict (Nixon, 1993) more attention is being paid to alternative economic development and planning approaches such as CED and shared decision-making by both governments and citizens.

The BC government began experimenting with public participation processes in the early 1990's by initiating the Commission on Resources and the Environment (CORE); local and provincial round tables on the environment and economy; and the Clayoquot Sound Land Use decision. According to CORE's Commissioner, Stephen Owen, while these public involvement processes have met with varying and debatable degrees of success they mark an improvement over the "decide, announce, defend" approach of the past (Owen in Feagan, 1993). By 1995 there was an estimated 40 community resource boards or round tables operating in BC (CORE, 1995); most attempt to reach consensus amongst various local stakeholders and community interests. Their roles vary from offering advice, resolving policy disputes, or allocating resource rights to implementation responsibilities such as data collection, public education, enforcement and other management duties (Gale, 1996).

The first formal fisheries co-management arrangements made in the province were those associated with the Aboriginal Fisheries Strategy (AFS). In 1992/93, the program's first year, 80 agreements were made with aboriginal groups on co-operative management projects and pilot projects for commercial salmon sales (McDaniels et al, 1994; Hutton and Pitcher, 1997). Among the most well known examples of fisheries co-management in BC is the Skeena Watershed Committee. The Committee, formed in 1992, was comprised of five "equal partners" including First Nations, commercial, recreational, federal and provincial interests. Its accomplishments included devising a three year fishing plan for the Skeena River salmon fishery, public education programs and dialogue, selective harvest and sockeye enhancement initiatives, and increased data collection through a tagging program (SWC, 1996). Despite this success, the conflict between sectors that motivated the initiative reared

its head again in the difficult years of 1996-1997. The Committee was dissolved in March 1997 when the North Coast Advisory Board, representing commercial harvesters, withdrew its participation. This event concluded the Committee's operations and activities under the conditions of the MOU signed in 1992 (UFAWU, 1997). Many other cooperative fisheries initiatives, however, have been launched since 1992 including community fisheries committees, regional and watershed initiatives (Gallaugher et al, 1997). Many of these remain in existence today.

Although much has been written about fisheries co-management in BC since the AFS first began, the publication of Pinkerton and Weinstein's (1995) Fisheries That Work was a seminal point for the development of co-management arrangements in the province. The publication has been widely read and has sparked a debate about the merits of community-based fisheries in the province, particularly in the management of migratory salmon stocks. While there is significant agreement that co-management is an appropriate strategy for sedentary species (e.g. clam management), there is resistance from many who doubt its applicability in managing the migratory Pacific salmon.

From 1994 (year of the Fraser River Sockeye Public Review Board) to 1996 a series of resource conflicts and frustration with government policy and mismanagement brought about the realization among various fisheries stakeholders that increased cooperation was needed. Their motivation for seeking common ground: a) a shared concern for the resource, their livelihoods and their communities; and b) a common enemy in the Department of Fisheries and Oceans (DFO). Anger about the Pacific Salmon Revitalization Strategy, and the state of the salmon resource, was widespread. British Columbians called not only for more public and fish harvester involvement but also for a greater role for the Province of BC in fisheries management. At this time a broad consensus existed that DFO was not doing an adequate job of managing BC's fisheries resources. Further, serious concerns about a corporate policy agenda, with the potential to destroy small boat fishermen and rural coastal communities, had been expressed (Vodden and Gallaugher, 1997).

Subsequent events, such as the formation of the Pacific Fisheries Conservation Council, Groundfish Development Authority, Federal-Provincial Agreement on salmon management, Fish Protection and Fish Renewal Acts, offered some hope that this message had been heard and that the way in which BC fisheries are managed was about to change, moving in the direction of co-management and conservation. Although strict conservation measures have been implemented, however, the shift to true co-management in BC has not yet occurred. Decisions continue to made without consultation with communities or fishermen and efforts to constitute a new consultation structure have not yet produced results. Many expect continuing reluctance from DFO to devolve decision-making authority along with costs. The level of distrust and frustration remains high along the BC coast.

3.4 Literature Review Summary

In summary, a review of literature in the fields of sustainable development, CED, resource/fisheries management, and co-management has revealed integral links between each of these concepts. Fisheries co-management has its own set of specific requirements and conditions that are specific to the challenges of managing the complex human and ecosystem dynamics associated with the fishery. However, provided local interests are part of the co-management arrangement, fisheries co-management is simply one type of SCED strategy and therefore must abide by the guidelines of SCED more broadly. Similarly, co-management is one form of fisheries management and must therefore abide by the principles of sustainable fisheries. Further, both sustainable fisheries and SCED are components of the more general approach of sustainable development. Therefore all share the basic principles of sustainable development in common. These include equity (intergenerational equity and equitable opportunities for all to meet human needs), living within ecological limits, and public participation.

Some aspects of fisheries management fall outside of the realm of CED. Policies that are implemented to serve national or even international interests provide an example. Similarly a whole range of CED activities take place, even in a fishing-dependent community, that are not directly related to the fisheries resource. Fisheries co-management activities, however, fall within both areas. The relationships between these concepts can be illustrated, therefore, as follows:

Figure 8 Co-management: A strategy for sustainable development

Based on the findings of the literature review, it can be argued that in fishing communities co-management is an essential component of both sustainable fisheries and SCED. It is generally acknowledged that, in the long-term, the interests of fishing communities and the fisheries resources they depend upon are compatible. Many community leaders and citizens, particularly fishermen, recognize this, making them good candidates to act stewards of the resource and make decisions in the interest of sustainability. Without local involvement in fisheries management neither self-reliance nor sustainable development will be achieved. Self-reliance, for example, implies self-help - "local people take charge of solving their own problems and of capitalizing on opportunities (Lauer, 1993; 4)." For communities economically dependent on natural resources to take charge of their own problems, they must have the opportunity to participate in decisions about the way resources they depend upon are managed. Otherwise local issues and problems relating to resource management, and therefore to their local economies, may not be addressed. Nor will their ideas for solutions be implemented.

Local participation in resource decision-making can also help satisfy the SCED principle of social justice, which entails "a fair distribution of power in decision-making" (Gardner,1988; 5). Roseland (1994; 3) adds "public participation, therefore, is itself a sustainability strategy. Effective and acceptable local solutions require local decisions, which in turn require extensive knowledge and participation of the people most affected by those decisions, in their workplaces and their communities."

Many of the principles of sustainable fisheries, such as participation, cooperation, recognition of local knowledge and rights of adjacency, also suggest that co-management of fisheries is required if the goal of sustainable fisheries management is to be met. Thus, both SCED and sustainable fisheries management require that co-management arrangements be established. Finally, in Our Common Future (WCED, 1987; 63) the World Commission on Environment and Development recommends "decentralizing the management of resources upon which local communities depend, and giving communities an effective say over the use of these resources". Co-management, therefore, is considered a requirement for sustainable development.

Not only are guiding principles shared directly in both fields but common process steps are also recommended. Both SCED and co-management efforts are driven by community needs, vision and values. These needs, vision, and values must be determined early on in the development/co-management process and then monitored. Co-management principles are process principles, most of which can be applied to an effective CED process as well. An effective and ongoing program of strategic planning, action and monitoring (management) is required in all cases.

Finally, success factors of SCED, sustainable fisheries and co-management are also shared. Social cohesion, for example, is a factor in the success of both SCED and co-management efforts. Qualified staff, volunteer spirit and a commitment to environmental stewardship are required in all cases, along with access to information, organizational capacity, and financial resources. Similarly, healthy natural resources facilitate fisheries co-management activities and SCED.

Fisheries managers and SCED practitioners, therefore, can learn a great deal from one another. For both to gather the information they require to make good planning decisions, or run planning processes independent of one another, makes duplication of effort inevitable. Sharing information represents an opportunity to increase the efficiency and effectiveness of planning and information gathering in both CED and fisheries management. Despite the importance of the linkages between fisheries co-management, SCED and sustainable development these relationships have received little attention to date in the literature. Instead they are covered in what might, without further consideration, appear to be disparate fields.

Chapter Four

Community Economic Development in Alert Bay

In Chapter Three a framework for evaluating CED in a case study community was developed and presented. Elements of this framework include SCED principles, strategies, process steps and conditions for success. Chapter Four provides a comparison of the CED activities taking place in Alert Bay and this framework.

During the field research period (1996-1998) 11 organizations active in CED on Cormorant Island were identified. Strategies for SCED employed by these organizations, and the principal sectors within which CED activities took place, are summarized in Section 4.1. A detailed description of each organization, their mandate and activities is available in Vodden (1999). Findings regarding the degree to which principles (Section 4.2), process steps (Section 4.3) and conditions for success (4.4) for SCED are applied and relevant in the case study are then presented. Findings are presented in summary, tabular form. Supporting data and analysis are provided in appendices 8 and 9.

4.1. Sectors and Strategies

When determining what CED projects to undertake in their communities, practitioners must choose a strategy (or set of strategies) most appropriate for their community's needs and abilities. Within a given strategy a number of specific projects might be undertaken. Strategy and project selection are critical steps in the CED process. The key purpose of the following section is to provide a picture of CED efforts in Alert Bay within the study period by describing the SCED strategies employed.

An initial observation from the field research was that organizations and their leaders tend to describe their CED efforts in terms of industrial sectors rather than the more functionally based strategies identified through the literature review. Therefore, sectors, as well as strategies have been used below to illustrate the range of their activities.

4.1.1. Sectors of CED Activity

Based on early field research, 14 areas of opportunity for CED in Alert Bay were identified. Before being exposed to these pre-selected categories, however, interview respondents were asked what opportunities had been identified by their organization (see Table 10 below). Opportunities within 6 of the 14 categories were mentioned. Because the Inner Coast Natural Resource Centre (ICNRC) was identified as an opportunity (see Vodden, 1999 for a description of this organization), a fifteenth category was added into which the ICNRC falls: the generation, management and dissemination of knowledge and information (research and education).

Table 12 Cormorant Island CED Opportunities

Q.3: What opportunities for CED has your organization identified?
Tourism
Value-added cedar mill
Local management of marine resources
Habitat restoration
Carving
Arts and crafts
Net mending/washing
Shellfish
Small business
Inner Coast Natural Resource Centre (ICNRC)
Dock divestiture
Smoked salmon
Logging
Silviculture

Figure 9 summarizes the extent to which the organizations involved in this study are actively pursuing development opportunities in each of these 15 sectors, as well as an estimate of the level of economic potential in each sector. There is general agreement that opportunities exist in seven of these sectors: fisheries; shellfish aquaculture; forestry; value-added processing; tourism; arts; and housing. However, some residents and community leaders have reservations about development in most of these sectors as well (see Vodden, 1999b) that must be addressed through sector-specific planning. Of these seven sectors, Alert Bay organizations are most actively pursuing fisheries, tourism and education/research/information management. While significant opportunities have also been identified in shellfish aquaculture, forestry, value added, arts and crafts and housing fewer organizations are undertaking projects in these areas. Individuals have identified further opportunities in the other eight sectors as well. Opportunities, along with community activity, in agriculture, service, and technology are, however, thought to be limited.

Figure 9 Sectors of CED activity

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
'Namgis First Nation	l		l		l				m		m	m	l	l	l
Village of AB	m	m		m	l								m		m
CIEDS				l											m
Whe-La-La-U					m		m	m			l	m	l	l	m
Tourism AB					l										m
NB/UFAWU	l				l							m			m
ICNRC	l	m	l	m	l				m						l
KTFC	l	l		m										m	l
MTTC	l		l		l						m				m
NIFC	l				l										m
U'Mista				m	l		m			m	l				l
Potential	**4**	**4**	**4**	**4**	**4**	C	C	C	C	C	**4**	**4**	C	C	**4**

Legend

1. Fisheries 9. Professional services
2. Aquaculture 10. High technology industries
3. Forestry 11. Arts and crafts
4. Value-added manufacturing 12. Housing
5. Tourism 13. Health
6. Agriculture 14. Nutrition
7. Retail 15. Education/research/information

8. Services (e.g. personal, business)

Symbols:

l = Yes; m = To some degree/limited; where no symbol is present there is no evidence of activity in this sector. 4 = Medium/high to high economic potential; C low to medium level of potential.

Opportunities, constraints and activity within each of these sectors are discussed in detail in Vodden (1999b). The multi-sector approach employed by Alert Bay organizations is indicative of an overall attempt to diversify the Alert Bay economy. Concentration of effort in the tourism sector, however, indicates that caution is required to avoid the creation of a new single sector dependency.

4.1.2. Strategies

Of the 15 potential strategies for SCED, training and education (human resource development), making improvements to the local environment, celebrating local identity and culture, and community involvement in resource management are the most popular strategies employed by Cormorant Island organizations (see Figure 10). Lobbying senior governments (e.g. for financial resources, resource control) has also been an important and effective strategy, one which was not identified as a CED strategy by the literature. Joint ventures/business partnerships have also been pursued to some degree by First Nations organizations.

Encouraging entrepreneurship, strengthening the informal economy, increasing local ownership, physical infrastructure improvements, quality of life improvements, and environmental business management are strategies employed to a lesser extent. Work sharing and business recruitment are the only strategies identified that are not used on Cormorant Island. Business retention and assistance, and "plugging the leaks" are practiced only to a very limited extent. Most respondents did not consider a viable option. Strategies employed are discussed individually in Vodden (1999b).

Examination of the strategies employed by CED organizations sheds insight into their priorities and guiding principles. The use of lobbying as a strategy by Alert Bay organizations, for example, is characteristic of the community's continued dependency on senior governments for both financial resources and access to natural resources. The range of activities now underway, on the other hand, indicates a commitment to economic diversity. The high value placed on culture/identity and resource stewardship can also be seen by the strategies selected. Finally, an ongoing commitment to the fishing sector is also evident. "Compliance" with the principles of SCED is the subject of the following section.

Figure 10 SCED Strategies

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
'Namgis First Nation	m	l		m	l		l	l	l	l	l	l		l	l
Village of AB	m	m	m	m	m		m	l	l	l	l	m		m	l
CIEDS				m											
Whe-La-La-U		l			m			l		l	l				
Tourism Alert Bay		l								l		m		m	
NB/UFAWU		l						m	m		m				
ICNRC		l						l		m		l			
KTFC		l			l		m	l		m	m	l		l	l
MTTC	l	l			m		l	m		m		l	m	l	l

NIFC		l						m	m			l			m
U'Mista	l	l			m			l	m	l	m				

Legend

1. Encouraging the development of new businesses or community organizations

    1.a. Environmental business development

2. Developing human resources

3. Work sharing

4. Plugging the leaks

5. Strengthening the informal economy

6. Recruiting businesses from outside the community

7. Increasing local ownership

8. Making improvements to the local environment

9. Physical infrastructure improvements

10. Celebrating local identity and culture

11. Quality of life improvements (e.g. social, health, recreational services)
12. Community involvement in resource management
13. Business retention/assistance
14. Environmental business management
15. Other? - lobbying, joint ventures

Symbols:

l = Yes (Medium to high degree of activity); m = To some degree (limited or low to medium degree of activity); where no symbol is present there is no evidence of this strategy being used.

4.2. Sustainable CED Principles

According to interview respondents, all of the principles of SCED identified in the literature review are important and relevant to their organizations and to the community of Alert Bay as a whole. All principles were considered at least somewhat important to all respondents. Multiple respondents indicated that public participation, diversity and integration were only "somewhat important", while others felt that capacity building was "very important". Responses to the question "What are the most important objectives of CED?" confirmed that many community leaders are concerned about public input, opportunities for young people to stay in the community and self-reliance, along with the traditional economic objectives of job creation and revenue generation.

When asked if there were principles missing from the list provided, respondents suggested: "enthusiasm", "cultural issues", "historical issues", "traditional issues", language issues", and "morality", with culture/tradition being the recurring theme.

Figure 11 demonstrates the degree to which actions have been taken by Cormorant Island organizations to ensure the principles of SCED are reflected in their activities (principle compliance). As discussed in Chapter Two - Methodology, this was determined by examining the degree to which indicators selected for each principle had been addressed by the various organizations in the community. Overall, it was determined that there is a medium level of compliance with the principles of SCED on Cormorant Island. Compliance was slightly higher for First Nations organizations than for the Village of Alert Bay. Self-reliance, economic viability, and integration showed the weakest compliance; stewardship, diversity, cooperation, and community-building the highest. Despite a medium-high degree of compliance in the latter areas, the need for further improvements was identified. See Appendix 6 for a more detailed discussion of data and analysis pertaining to principle compliance.

Many respondents believe that Alert Bay's alignment with the principles of SCED is related to the influence of First Nations culture on the community, a culture they say shares CED's basic approach as the following comments reflect:

> The exercise of Kwakiutl First Nations jurisdiction is not simply a matter of unextinguished rights; it is more fundamentally a responsibility that is rooted on Aweena K'ola - a *oneness with the land and sea* that is basic to who the Kwakiutl are as a people and as part of the ecosystem (KTFC, 1998; 6).

> When we go deer hunting we share that with the families, clam digging, we share ... that's a First Nations way of doing things (N6).

It's built in already... We already think holistically (KTFC workshop participant).

> … our vision did not begin with us but came from the First Nations peoples who's land we share (ABEDC, 1996).

Figure 11 Compliance with SCED principles

	'Namgis	Village	Tribal	Cormorant Island
1. Living within ecological limits	m	m	m	m
2. Stewardship	l	m	l	l
3. Self-reliance and community control	m	m	m	m
4. Fairness and equity	l	m	m	m
5. Public involvement	m	m	m	m
6. Economic viability	m	m	m	m
7. Capacity building	l	m	m	m
8. Long term planning	m	m	m	m
9. Diversity	l	l	l	l
10. Collaboration/cooperation	l	l	l	l
11. Integration	m	m	m	m
12. Qualitative development	l	m	l	m
13. Recognition of informal economy	m	m	m	m

14. Collective benefits	?	l	l	m
15. Community building	l	l	l	l
16.Entrepreneurialism	m	m	l	m
OVERALL COMPLIANCE	m	m	m	m

l = Medium to high level of activity in support of this principle; m = Limited or low to medium degree of activity; where no symbol is present there is no evidence of activity in support of this principle. ? = response not available (conflicting or insufficient evidence). See Appendix 6 for further explanation.

While the philosophy underlying development efforts in Alert Bay may be compatible with a SCED approach, the absence of planning and evaluation/monitoring significantly impacted the evaluation for both individual organizations and the community as a whole. Without a formal strategy there is little evidence of compliance, particularly where interview respondents did not provide information on the subject. Planning and monitoring were considered important indicators of principle compliance within several categories. Had such a process been in place it is expected that compliance would have been high overall. The CED process (or lack of a formal process) taking place in Alert Bay is discussed further below.

4.3 The CED Process

The CED processes employed by organizations within each of the respondent categories during the study period are summarized below and compared, in Figure 12, to the process recommended in the CED literature. As discussed in Chapter Three, communities may modify this process (particularly the order of events) to suit their needs. However, a review of the processes undertaken by Alert Bay organizations demonstrates that only a minority of these steps have been

taken in Alert Bay in recent years. Further, the steps that have been taken have not followed a

Figure 12 Recommended process steps

	'Namgis	Village	Tribal	Cormorant Island
1. Identify issue, need, opportunity	l	l	l	l
• Identify leader/core leadership group	m	m	m	
• Build community support/involvement	m	m	m	m
• Create/select development organization		l	m	
• Research other communities' experiences	m	l	l	l
• Design and implement planning process	m	m	m	m
• Ensure resources are in place for process				
• Establish a vision		m	m	m

• Create/update community profile				
• Identify/confirm issues and opportunities	m	m	l	m
• Assess local capacity/readiness for change			m	
• Set long term goals and objectives				
• Determine how success will be measured				
• Create a strategy (with targets, goals etc.)			l	
• Create local partnerships	l	l	m	l
• Raise funds locally				
• Generate additional capital/resources as required	l	l	l	l
• Implement project action plans	l	l	l	l
• Develop human resources	l		l	m
• Evaluate progress and, if necessary, adapt strategy				
• Build on successes	m	m	m	m

l = Has been done; m = Has been done to some degree; where no symbol is present there is no evidence of this activity.

continuous and deliberate planning process. Beyond identifying problems and brainstorming opportunities very little has been done for the community as a whole. Instead planning efforts have been organization or project specific. Public participation has been invited only to a limited degree and input received has often not been given serious consideration. Further, no common community vision has been agreed upon, although several organizations have developed their own. Respondents felt that such a vision could help mobilize the community: "Well you need a vision, you've got to have a lot of people in that vision, lot of people talking about that vision" (T4).

4.3.1. ‘Namgis First Nation

"NIDA was the beginning of everything" (N6). The CED efforts of the ‘Namgis First Nation have been guided by the Nimpkish Integrated Development Approach (NIDA) since the 1970s. With assistance from the MTTC Economic Development Officer, the plan was updated periodically, but is now considered outdated as all elements have been implemented.

> … over a period of 20 years I used that as my guide. Everything in that plan has been done... we have everything. We had a shipyard, we had a lounge, a cafeteria. We do have a new school, we do have a cultural centre - all a part of community building. And we do have a health centre (T4).

Although NIDA's economic ventures were less than successful, the ‘Namgis have had successes on issues of equal or greater significance to the community, issues fundamental to community well-being and the success of future CED efforts. These priority issues include health, education and cultural revival. Excellent programs have been established in these areas and, while they remain areas of concern (see Vodden, 1999), marked improvements can be seen. Land claims negotiations have also been initiated, which will have long-term consequences for CED.

There appears to have been little commitment to economic development from the 'Namgis First Nation in recent years, despite job losses and declining incomes. 'Namgis respondents indicated that they had not, as an organization, brainstormed about economic development opportunities "as seriously as they should" since the NIDA plan. An MTTC representative helped facilitate a community meeting to generate ideas in 1996. However, none of the 'Namgis representatives referred to this event. In fact, none of the Council members attended the meeting and the recommendations made by those who did have not been endorsed by the Council. This lack of commitment at Council level has been frustrating for EDO staff: "I've been working in isolation for 10 years now anyway, but why do they give one person this power? And when I go with a question they say - well continue what you're doing because you're doing a good job (T4)."

During the interviews 'Namgis respondents were generally very critical about the lack of a current CED plan for their organization. N3 explained the present approach: "it might not be on the plan, someone will have a good idea and we'll look at that and if it looks good we'll try it." "Right now it's basically reactive" (N8) said one 'Namgis council member. "It's a Band-Aid type approach" (N2), added another. "We have our own economic development program here....I really don't know what it does... We should be planning right now about the future" (N4), a third agreed, while N1 declared "We need a stronger commitment." It appears, from these responses, that economic development may now be a higher priority for the Nation's leadership. Despite this apparent increase in interest, however, a comprehensive CED planning process has not yet been put in place.

4.3.2. Village of Alert Bay

The Village of Alert Bay has engaged in several of the recommended CED planning steps. Currently, however, there is no strategy being actively developed or implemented. Planning for the Village over the years has consisted primarily of strategies written by outside consultants with little public involvement. A process launched by the Alert Bay Economic Development Commission (EDC) in 1996, however, followed a different approach, more closely aligned with that of SCED. However, the process had several flaws and as a result the strategy met with resistance from some segments of the community, particularly First Nations and forestry firms. The Strategy did not proceed to implementation but was instead "put on hold".

Lack of two-way communication, particularly with First Nations, and a tendency to move too fast were problems identified with the EDC process. The community's readiness for change had not been assessed. Interview results demonstrated that two years later the community at large was only beginning to accept the need for fundamental change and cooperation. Yet, with the urgency of Mifflin Plan job losses looming, the EDC felt the need to take action.

Further, the process did not involve the broader community early on. Ronald and Associates recommended in their 1990 Strategy that the Village "Develop a clearer sense of community vision and communicate and promote it to all residents" (Ronald, 1990; 43). This "top-down" model was used by the Commission's three-person steering committee to develop the vision and strategy, with community meetings conducted afterwards to gather further ideas and input. The vision developed by the Commission read as follows:

> Our vision is to become a community of healthy, happy individuals who are sustained by the resources of our adjacent environment and who are active in the process which works in turn to sustain that environment.
>
> We endorse the British Columbia Round Table on the Environment & the Economy's definition of sustainable development — "development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs".
>
> We also accept the Round Table's definition of a sustainable community ...
>
> (ABEDC, 1996; 2)

While closely aligned with the principles of SCED, this vision is clearly not derived from the Alert Bay community at large but rather from the background research, also an important step in the planning process, conducted by leaders of the Commission. For example, culture, an essential element of the community, is not referred to.

A forum was held by the EDC in August 1996, to seek ideas for economic development. More than 50 suggestions were made in response to the question "What are the opportunities for diversifying the Cormorant Island economy?" However, the Strategy had already been developed by this point (June 1996) and had begun to run into opposition. The Strategy was put on hold in the fall of 1996, the "sparkplug" dismissed, and the process came to a halt, with the exception of implementation of two projects that were already underway (ICNRC and a value-added

mill). Nothing came of the input given by more than 50 forum participants. To date there has not been a renewal of the planning process and the responsibility for economic development has been left primarily with the Cormorant Island Economic Development Society (CIEDS). CIEDS was formed after an October 1996 resolution of Council to create an Economic Development Organization, with a Council representative, and to transfer all projects of the EDC to the new society for implementation.

4.3.3. Other First Nations Organizations

> It would be very beneficial for each First Nation council to create a five or ten year plan for how it is going to increase its involvement in the forestry sector, so there is a guide for what projects to look into... This is different than a hit-and-miss approach (Morford, 1996).

Cormorant Island First Nations organizations have pursued CED planning to various degrees. Whe-La-La-U Area Council has not yet been involved in economic development (planning or implementation), although it delivers a range of social programs. U'Mista Cultural Centre, on the other hand, has both a long range plan, annual workplans and public reporting. Plans include not only cultural programs, but also training and development in the arts and tourism sectors. The Society has attempted to implement nearly all of the planning steps referred to above.

The KTFC launched a Holistic Management planning process in 1997, hosting three Holistic Management Conferences in 1997-98. These events included visioning, identification of community boundaries ("the whole to be managed"), strengths, weaknesses, opportunities and threats. The conferences also served as a tool for community outreach and staff training. Further, results were to be carried forward and integrated into the organization's future activities and planning. The holistic planning model used by the KTFC also stressed the need for monitoring or "testing your decisions". It is too soon, however, to determine if implementation and monitoring stages will indeed follow the holistic model. The KTFC also prepares annual workplans.

According to one representative, the MTTC, like most other organizations, is in need of an integrated CED plan:

> We need to have integrated development strategies for forestry and fisheries. Now if we had policies in place or a statement of what the initiatives are in forestry and fisheries, then everyone can work together. Right now everything is all over the place and there's no integrated approach to anything ...what needs to happen is there needs to be a comprehensive community-based five-year plan in place for economic development which includes fisheries and forestry and all those things that make our economies grow (T4).

Since joining the MTTC as Forestry Coordinator in 1996, Morford (1998b) has encouraged increased planning efforts, pointing out that steps such as analyzing the current situation are necessary to be able to ride the wave of structural change (vs. getting drowned by it) and to find niches to take advantage of changing circumstances. She adds: "A plan would help band councils know what projects to invest in, what training programs to seek --- plus it would help potential forest industry partners to know where the bands are coming from and increase the chances of getting successful partnerships" (Morford, 1996; 1).

4.3.4. Summary - Cormorant Island

In summary, a number of the recommended CED planning steps have been implemented by Cormorant Island organizations, including identification of issues, brainstorming solutions and researching the experiences of other communities. Some have developed vision statements. However, the process has generally been implemented in a piecemeal fashion and has tended to fizzle out after the early "brainstorming" phases due to a number of factors - ranging from insufficient public input and communication, to conflict, lack of staff, volunteer and funding resources as well as an absence of leadership commitment. As a result the development process has, in several cases, not survived to the implementation phase. According to Ronald (1990; 6) this has been a longstanding situation: "The community has no shortage of ideas and we have heard of many good ones. The challenge is to turn some of these into concrete action."

CED on the Island has been primarily project driven, from the projects designed to take advantage of fishermen's income relief programs to the CIEDS mill, KTFC oyster project or the 'Namgis logging joint venture. Projects have generally not, however, been linked to an overall strategy. Examples of long term, integrated planning turned into action do exist, however. NIDA is the most notable of these. Further, despite increased collaboration between local organizations, to date planning has been done only by individual organizations (e.g. U'Mista). There has not been a broader effort to coordinate the plans of these individual segments of the community as a whole. The jointly sponsored 1999 Alert Bay Community Alert meeting may signal a change in this approach (see Vodden, 1999).

Despite the absence of an overall plan there are common threads that run between the efforts of all Alert Bay organizations, including pursuit

of opportunities in the tourism industry, a desire for increased local control of the management of natural resources, and a strong connection to their community and the surrounding ecosystem. These characteristics - shared vision, identified opportunities, a sense of community and stewardship - all contribute to the community's potential for success in SCED. In the following section an analysis of Alert Bay's strengths and weaknesses with respect to planning and implementing SCED will be presented, along with an assessment of the importance of these factors to their overall success.

4.4. CED Success Factors

Factors of success in CED, alternatively described as areas of community capacity, within seven major categories were identified in the literature review (Chapter Three). These seven categories include: 1) human resources and human resource development; 2) economic and enterprise capacity; 3) financial capacity; 4) social/quality of life factors; 5) organizational capacity; 6) ecological factors; and 7) community resources — other. The importance and presence within the case study community of success factors within each of these categories are summarized below. See Appendix 7 for a full discussion.

4.4.1. Respondent Perspectives

To assist them in contemplating the factors of success in CED, interview respondents were first asked to identify CED initiatives their organizations had undertaken that they considered to have been successful. The 'Namgis Salmon Enhancement Program/Gwa'ni Hatchery came to the minds of many. The Program is clearly a source of community pride. It's success is attributed to knowledgeable leadership, community support, persistence and long-term commitment. Funding has, however, been a challenge as have changing natural conditions (e.g. ocean survival), fisheries policies and the lack of available information about Nimpkish salmon stocks and habitat.

Other community successes include: cultural programs such as the dance performance group, ethnobotany manual and catalogue of cultural resources (U'Mista Cultural Centre); numerous fishery projects ranging from roe-on-kelp harvesting to the Fisheries Guardian program; training programs (e.g. band management, social work, and SFU teacher training); local parks such as Gator Gardens and the children's play park; and recycling. Attracting cruise ships was also mentioned. Initiatives that were not considered successful included an oyster culture project; housing project; golf course; museum; shipyard and language retention program. Respondents pointed out, however, that even "unsuccessful" projects provided valuable learning experiences. Early CED projects of the 'Namgis First Nation, for example, provided training for two of today's most influential CED leaders.

When asked to consider what made successful projects work well and unsuccessful projects fail, respondents identified the following key success factors for CED based on their practical experiences: technical knowledge; management skills; planning and vision; adequate funding; community backup; government support; hard work; leadership; and desperation (need).

Subsequent questions revealed that respondents felt lack of funding and lack of skills and education were the biggest barriers to implementing successful CED projects in Alert Bay. Senior governments were the next biggest barrier, followed by poor transportation routes/infrastructure, community division and negative attitudes.

Community members identified community strengths that facilitate their CED efforts. Their biggest strengths, or assets, are the people, the environment and the First Nations culture. Leadership, relationship building ("people get along") and tourism potential were also mentioned.

4.4.2. Comparison to the Framework

1. Human Resources and Human Resource Development

> The heart of a community is its people. Without individuals who possess certain knowledge, skills, values and sense of commitment, CED cannot happen and organizations and communities cannot exist. Thus, human resource strengths and requirements represent a logical starting point in the evaluation of community capacity
>
> (Markey and Vodden, 1999; 7)

Interview respondents stated that the people of Alert Bay are one of the community's greatest resources, along with the surrounding environment and Kwakwaka'wakw culture. Respondents noted that Alert Bay residents have intelligence, character ("big personalities"), and

talent , are excellent fishermen, available to participate in the labour force and have a stubborn determination to survive. They have a strong commitment to their community, a sense of history, stewardship and responsibility, along with a willingness to look at new options.

Despite these strengths, however, it was determined that Alert Bay possesses the human resources necessary for CED only "to some degree" (see Figure 13 below). Concerns were raised in most areas, including leadership, secondary school education, workforce reliability, health (see also social/quality of life factors), business and technical skills, entrepreneurialism, voluntarism, and willingness to change. There has been a resistance to change among residents, who have an attachment to their way of life - particularly fishing. Respondents felt that, in 1997/98, this had begun to change. Lack of skills and education are thought to be among the biggest barriers to implementing successful CED projects. These concerns are discussed in detail in Appendix 7. Respondents agreed that human resources are extremely important, citing directly six of seven human resource-related factors found in the literature review. The presence, or absence in the case of a secondary school, of educational institutions was also mentioned, although only indirectly, as a factor.

Figure 13 Human resource factors

Factors from the literature	Important	Present
1. Clear and appropriate leadership	l	m
2. Availability of education, training programs and learning opportunities	m	m
3. Labour force (skill, specialization, flexibility, age, education, health, participation)	l	m
4. Management, marketing, technical/professional skills	l	m
5. Entrepreneurial spirit	l	m
6. Active citizens/volunteers	l	m
7. Willingness to change	l	m
OVERALL	l	m

Symbols: l (important, present according to most indicators), m (somewhat important, present according to some indicators), no symbol indicates not important or all indicators demonstrate factor not present.

2. Economic and Enterprise Capacity

A range of economic and business conditions create an environment conducive to CED. Case study evidence indicates that four of seven of the identified economic success factors have been of importance to the success of CED in Alert Bay (see Figure 14). Lack of economic diversity and poor business health have had mixed impacts. On one hand, poor economic conditions have acted as an incentive for action. However, reliance on government and the fishery has made the transition to self-reliance more difficult and created resistance to change among many residents. Further, hard times for local businesses have put additional pressures on business owners who are relied upon not only

for job creation but also for their participation in the voluntary sector.

Figure 14 Economic factors

Factors from the literature Important Present

1. Business success rates / economic health ? m
2. Economic diversity (sectors, employers) ?
3. Local ownership l m
4. Local supply and demand networks ? m
5. Existence of outside trade networks / access to markets l
6. Base of informal (non-cash) economic activity l l
7. Identified economic diversification opportunities l l

OVERALL l m

Symbols: l (important, present according to most indicators), m (somewhat important, present according to some indicators), no symbol indicates not important or all indicators demonstrate factor not present. ? = response not available (conflicting or insufficient evidence).

The community has limited access to outside markets, having relied on local buyers in the past in both the fisheries and service sectors. Lack of local ownership and control of surrounding natural resources is a barrier, although businesses within the community itself are generally locally controlled. Few local trade networks and linkages have been created, with the exception of businesses such as the new net cleaning business launched to service the aquaculture industry and the shipyard, which provides parts and repairs for the local fishing fleet. Economic capacity in Alert Bay is essentially weak, strengthened only by active informal economy and the range of economic opportunities that have been identified.

3. Financial Capacity

Interview respondents agreed that access to financing is critical to the success of CED projects and planning. Lack of funding is seen as one of the biggest barriers to CED in Alert Bay. Frustration was expressed that funding is more easily obtained for projects than for planning and operations. Organizations have relative success at attracting grants from governments and foundations. Investments from local and external lenders, however, are scarce (see Figure 15 below and Appendix 7 for further discussion). Joint ventures appear to be the most promising source of external, private investment in Alert Bay ventures at this time. Local sources of capital include the Credit Union, monies raised through small fundraisers and service clubs, and, regionally, Community Futures Development Corporation. Overall, financial capacity is limited. The potential for alternative financing vehicles such as a community loan fund was identified by respondents but has not yet been pursued by local organizations.

Figure 15 Financial capacity

Factors from the literature Important Present

1. Ability to obtain, grant funding from external sources l l
2. Ability to access outside capital / credit (loans, investment) l m
3. Ability to generate capital locally l m

OVERALL l m

Symbols: l (important, present according to most indicators), m (somewhat important, present according to some indicators), no symbol indicates not important or all indicators demonstrate factor not present.

4. Social/Quality of Life Factors

Social capital is an important input into CED activities, just as financial, human and natural capital are. Components of social capital include a sense of social cohesion, cooperation, and community identity. Other factors in the quality of community life that may contribute to CED success include amenities such as recreational facilities, arts programs, and health services.

Like other success factor categories, social factors are considered important to CED success in Alert Bay but are present in the community only to some degree (see Figure 16). Sense of community identity, culture and history is extremely strong. A number of cultural programs also exist. However, there are limited social and recreational activities (particularly for youth), conflicts and divisions stand in the way of social cohesion, and, while improving, a host of health problems impact community well-being and development.

Figure 16 Social and quality of life factors

Factors from the literature	Important	Present
1. Sense of community identity, culture, history	l	l
2. Social, recreational and cultural amenities	l	m
3. Health and well-being (current levels and related services)	l	m
4. Social cohesion/collective spirit	l	m
OVERALL	l	m

Symbols: l (important, present according to most indicators), m (somewhat important, present according to some indicators), no symbol indicates not important or all indicators demonstrate factor not present.

While health services on the Island are considered to be excellent, particularly those of the 'Namgis First Nation, and health appears to have improved in Alert Bay since the 1980s, mortality rates remain much higher than elsewhere in the region. Lifestyle related factors (substance abuse, smoking and diet-related diseases etc.) contribute significantly not only to mortality but also to problems in the labour force and the level of involvement in community affairs. Impacts of the residential school, including low self-esteem, are also considered to be a factor. The need for healing remains a significant barrier to community development. Interview respondents expressed particular concern for the youth of the community. Refer to Appendix 7 for additional details.

5. Organizational Capacity

Successful CED requires the development of effective supporting institutions, along with strong capabilities for planning and analysis. These organizations, for example, are critical to a community's ability to analyze and adapt to externally driven change. Organizations must be trusted and recognized as legitimate by both the community and those outside. In part organizations build a relationship of trust with the community through effective public participation. The ability to partner with other organizations is also essential. Findings from the case study support these conclusions of the literature review.

However, Alert Bay organizations have yet to develop strong organizational capacity overall (see Figure 17). While the organizations in Alert Bay have grown in number they have yet to develop into a fully effective organizational infrastructure for CED in the community. Although long-established organizations such as U'Mista Cultural Centre have developed ways to increase their organizational effectiveness (e.g through annual planning and reporting to their constituents), the need for increased public involvement and information/communication remains, organizations are financially dependent on government, and do not cooperate with other organizations to the degree that is necessary. Inadequate planning has been discussed above.

Lack of coordination and collaboration between organizations is improving. One of the barriers to collaboration has been fear of losing an organization's individual identity and not being able to represent the best interests of their constituents while also improving the well-being of the community as a whole. Coordination, however, doesn't have to mean giving up an organization's individual efforts/identity. Multiplicity is part of the reason so much has been accomplished to date, with many organizations each making their own contribution, motivated by their own particular mandates. Increased two-way communication, however, could benefit all. Realizing this, organizations are now working on ways to work together that do not jeopardize the interests of one segment of Alert Bay society while advancing those of the whole. Ways to ensure treaty negotiations, Aboriginal rights and title are not jeopardized, for example, have been a priority in cooperative endeavors. Collaboration with other communities in the region has also proven to be important. Alert Bay organizations participate in many regional organizations relating to economic development and resource management (Mitchell et al., 1999).

Finally, existing community organizations cover many of the facets of CED in their mandates. The absence of organizations in areas such as the arts, conservation and business, however, indicate that there may yet be room for development in the non-profit sector.

Figure 17 Organizational capacity

Factors from the literature	Important	Present
1. Range of community-based organizations and institutions	m	m
2. Health/effectiveness of local organizations and institutions	l	m
3. Broad-based community participation	l	m
4. Willingness/ability to sustain long-term development efforts	l	l
5. Willingness/ability to collaborate	l	m
6. Experience/willingness to use strategic planning & evaluation	l	m
OVERALL	l	m

Symbols: l (important, present according to most indicators), m (somewhat important, present according to some indicators), no symbol indicates not important or all indicators demonstrate factor not present.

6. Ecological Factors

The environment that surrounds Cormorant Island is considered by interview respondents to be one of Alert Bay's greatest assets. A rich surrounding ecosystem, with plentiful ocean resources, access for water-based transportation and proximity to scenic Broughton Archipelago provides opportunities for Alert Bay's future sustainability. As such, ecological factors are of significant importance to the success of CED efforts. An assessment of individual factors related to environmental sustainability confirms resident perceptions that, despite a range of threats to ecological health and past degradation, the surrounding environment is currently the community's strongest area of capacity (see Figure 18).

Figure 18 Ecological factors

Factors from the literature	Important	Present
1. Environmental health	l	m
2. Protected areas	l	m
3. Productive natural resources	l	l

4. Unique natural features l l
5. Stewardship ethic l l

OVERALL l l

Symbols: l (important, present according to most indicators), m (somewhat important, present according to some indicators), no symbol indicates not important or all indicators demonstrate factor not present.

7. Community Resources - Other

A range of other local factors that do not fit neatly under the categories discussed above are also important to the success of CED efforts. Access to information and communication technology, for example, is critical but seen to be lacking in Alert Bay (see Figure 19). Some information, such as fisheries stock health, is simply not available. In other cases local organizations have not made an effort to access it (e.g. status of endangered species), while in still other cases factors such as lack of knowledge and poor Internet access have proven to be limiting factors. Organizations such as the ICNRC, U'Mista Cultural Centre, and T'lisalagi'lakw School are attempting to improve access to information in the community.

Case study results also confirm that the quality of a community's physical infrastructure such as sewage, water and even unoccupied public buildings can impact the success of CED efforts. Inadequate sewage treatment and wharf facilities, for example, have been a barrier to tourism development in the community, while unoccupied buildings and excellent water availability have provided opportunities.

As in other fishing communities, transportation and proximity to market centers is a major determining factor in the feasibility of CED projects in Alert Bay. Isolation and lack of transportation access, resulting in higher costs for supplies and transportation for local businesses was seen as a significant barrier to CED success in Alert Bay (the fourth most frequently referred to by interview respondents). There is little evidence to date that these barriers to value-added enterprises, for example, can be overcome unless products are high-end specialty products with niche markets (e.g. First Nations art). Some respondents pointed out, however, that isolation is what makes the community unique and may be an attractive feature from a tourism perspective. In particular, the Island is accessible for those who are travelling the surrounding area by boat. Others feel the Island's isolation contributes to the quality of life.

Figure 19 Other community resources

Factors from the literature Important Present

1. Information/communication l m
2. Physical infrastructure (buildings, sewage, water etc.) l m
3. Transportation infrastructure/location/routes l m ?
4. Ability to adapt l ?

OVERALL l m

Symbols: l (important, present according to most indicators), m (somewhat important, present according to some indicators), no symbol indicates not important or all indicators demonstrate factor not present. ? = response not available (conflicting or insufficient evidence).

The ability of the community to adapt to change is unknown. Respondents pointed out that while the community has faced change in the past, a change of this magnitude (economic displacement due to fishing industry downsizing) has never been experienced.

Once again, each of these factors were very important in Alert Bay but present only to a limited degree.

4.4.3. The Eighth Category - External Factors

Based on field research findings an eighth category - "External Factors" was added to the list of seven internally-focused factors for success in CED. It became evident during the course of this research that "external factors" are an important success factor category of their own. In part this is related to the importance of government involvement in the fishery (see Chapter Five). However, there are a range of influences beyond government involvement in fisheries management that impact the community of Alert Bay. External factors of significance identified during the research include:

- court decisions with respect to Aboriginal rights and title;
- treaty negotiations;
- federal and provincial food processing regulations;
- federal and provincial funding for training and development (or "make work" projects);
- funding allocations that encourage collaboration or, conversely, result in community conflict/competition;
- the creation of New Forest Opportunities (a provincial hiring agency impacting silviculture opportunities);
- an entrenched system of forest tenure, management and industrial development;
- federal fisheries policies and restrictions on resource access;
- Indian Act impacts (e.g. on ability of First Nations to access financing, self esteem, culture, health)
- bureaucracy/maze of agencies involved in land use (e.g. impacting trail construction)
- industry interest in joint ventures/partnerships with First Nations;
- global market interest in First Nations culture/products; and
- changing ocean conditions, among others.

The external factors that impact CED at the local level are complex and multi-faceted. Although "senior governments willing and flexible enough to follow the community's lead, provide advice, cost-share development initiatives and develop policies that will support local efforts", was a critical factor identified from the literature and was included in the success factor checklist (see Figure 20). While communities can exert a degree of influence on external forces, by forming partnerships or lobbying for example, despite all other local capacities, CED success is frequently dependent on the ability of community leaders and residents to be aware of and able to adapt to changes occurring in the "outside world".

Figure 20 Forces of community change

The degree of outside influence on a given CED strategy or initiative must be therefore be considered when an attempt is made to determine likelihood of success. The case of co-management provides an excellent example. The degree to which government policy has impacted the success of co-management efforts in Alert Bay is discussed in detail in the Chapter that follows.

4.5 Chapter summary

Over the years Alert Bay has accomplished a great deal in the field of SCED with limited human and financial resources. Residents have many ideas for the future and a number of committed volunteers, staff and local organizations are striving to put these ideas into action. In their 1990 report Ronald and Associates (1990; 15) noted of Alert Bay that "There is clearly a lack of economic momentum and confidence within the community." Times have changed. Momentum has been gained. There is much more to be done and it may be too early in the process for confidence, but, by undertaking a range of SCED activities, community leaders and organizations have demonstrated a willingness to adapt to the changes that threaten their community's survival. Evidence indicates that the community at large is now, three years after the Mifflin Plan, ready to accept the need for change as well.

Findings also demonstrate, however, that Alert Bay organizations could be using their resources much more effectively, increasing their likelihood of success, through better coordination and more strategic planning and action.

CED efforts in Alert Bay are generally in alignment with the principles of SCED. Many of the community's leaders and CED organization share the philosophy of SCED, espousing its principles. Applying the principles of SCED, however, is no easy task. The absence of planning and monitoring programs in the community as a whole, in particular, has decreased the ability of CED organizations to put these principles into practice. Currently, compliance has been achieved only "to some degree". Culture/tradition was a recurring theme throughout the study and, it was, felt should be added as a SCED principle (See Chapter Six - Framework Review).

Successes have been achieved to date in the areas of salmon enhancement and restoration, cultural programs, training and education, parks and recycling. However, other initiatives have failed and those that have been sustained face a host of challenges. The surrounding ecosystem, with its rich resources and unique natural features, is a significant asset to the community. Other community strengths include knowledgeable leaders who are persistent and willing to work hard, the people, the Kwakwaka'wakw culture, sense of community, relationship building now underway. However, capacity building is required in the areas of skills and education, health, finance, transportation, social cohesion and community attitudes if the success rate of CED efforts is to be improved. All success factor categories within the framework were considered relevant and important in the case study setting, with some additions and modifications being made to the factors themselves. Efforts are underway to build capacity in problem areas.

Finally, a review of the CED strategies and initiatives taking place in Alert Bay demonstrates that while diversification efforts are underway, particularly in the tourism and "knowledge" sectors, fisheries still play a central role in Alert Bay's economy, culture and way of life - and therefore in their CED efforts. Fisheries and fisheries management efforts within the community are the subject of Chapter Five.

Chapter FIVE

Fisheries Co-management Results

The following chapter presents case study results pertaining to fisheries co-management. In Section 5.1 initiatives currently underway are summarized, along with the vision for the future of co-management shared by Alert Bay organizations. Details on local initiatives can be found in Vodden (1999). A comparison of the community's co-management efforts to the framework, or "ideal" process, developed in the literature review is provided in Section 5.2, including comparisons to the continuum of public involvement, recommended process steps, and principles of co-management. The degree to which co-management efforts to date have helped move fisheries management in the direction of sustainability is also discussed in Section 5.3. Finally, factors contributing to success or failure are examined in Section 5.4.

5.1 Community Involvement in Fisheries Management on Cormorant Island

The Kwakwaka'wakw have always been a fishing people. This tradition has been continued and expanded in new directions throughout the development of Alert Bay's traditional and commercial fisheries, with new residents, visitors and other users of marine and terrestrial resources joining the Kwakwaka'wakw to make fisheries management the complex and multi-faceted challenge that it is today. The Kwakwaka'wakw have also been stewards of the natural resources within their territory, and have fought for the protection of their rights to resource harvesting. As such they have had a long-time involvement in management activities and resource policy making. In 1927, for example, the Kwakwaka'wakw people called for restrictions on drag seining at the mouth of the Nimpkish River, stating that only the Kwakwaka'wakw should be permitted to fish in this location as the industrial fishery was interfering with the food fishery (Weinstein, 1991). They

also called for the prohibition of a proposal to dam the River for hydroelectric development. The development did not proceed (Newell, 1993). This tradition of stewardship continued through the years. In 1978, for example, local fishermen initiated a self imposed no fishing boundary along a half mile "ribbon" of Hanson and Cracroft Islands in an attempt to protect endangered Pink salmon stocks as they migrated through the area (Berry, 1999).

5.1.1. Current Activities

Today there are six Alert Bay organizations involved in the fisheries sector: Musgamagw Tsawataineuk Tribal Council (MTTC); Kwakiutl Territorial Fisheries Commission (KTFC); Inner Coast Natural Resource Centre (ICNRC); North Island Fisheries Centre (NIFC); Village of Alert Bay; and the 'Namgis First Nation. Of these, the KTFC and 'Namgis First Nation are most active (see Figure 21 below). Over time, as new organizations have been formed, new relationships established and local and DFO priorities adjusted, organizational roles and responsibilities have also shifted. The most common activities undertaken by these organizations are habitat protection and restoration, lobbying in an attempt to influence fisheries policy, and education/communication. The least common are enforcement, setting harvest targets, deciding on time and area of openings, allocation and licensing, and decision making regarding fisheries policy.

The KTFC is one of three organizations devoted entirely to fisheries and the management of marine resources on Cormorant Island, and the most active in the full range of fisheries management functions. The KTFC serves eight member Nations. Their programs include: monitoring and enforcement; enhancement; habitat restoration; research and stock assessment; land use referrals; facilitation and coordination; stakeholder consultation; shellfish aquaculture; education and training; marketing; policy management and input; and license leasing. KTFC has played an important and influential role in the development of fisheries co-management in the region and even in BC, sponsoring, for example, the first ever province-wide Aboriginal fisheries guardian conference. Primary funding for the organization has been received through DFO's Aboriginal Fisheries Strategy.

The KTFC has assumed many of the fisheries management responsibilities of the 'Namgis First Nation and MTTC in the past. Evidence indicates, however, that these organizations may be shifting back towards operating more of their own fisheries programs. The MTTC, for example, submitted a proposal to establish a shellfish management board in conjunction with the federal Department of Fisheries and Oceans (DFO), the Province and its member Nations, independent of the KTFC in 1998. The 'Namgis have also taken increased responsibility for activities such as restoration and assessment in recent years.

The Native Brotherhood/UFAWU Centre for Displaced Fisheries Workers (North Island Fisheries Initiative), and later the North Island Fisheries Centre (NIFC), have focused on funding projects related to rebuilding the fishery and diversification of fishing economies in the region, and on employment and training for fisheries workers. While the Native Brotherhood/UFAWU Centre is no longer active, NIFC remains. Its strengths include access to government funding as a delivery agent for Western Economic Diversification (federal) and Fisheries Renewal BC (provincial), and a diverse Board of Directors, made up of First Nations and non-First Nations fishing interests from around the region. NIFC has plans for expanding its involvement in the fishery beyond funding delivery in the future and has, to date, played a role in policy consultations and planning for regional fisheries management.

Habitat restoration projects undertaken by Alert Bay organizations are generally conducted in the Nimpkish Valley (traditional territory of the 'Namgis) and elsewhere in the region/ Kwakwaka'wakw territory. There are no fish-bearing streams on Cormorant Island itself. The Nimpkish River, however, holds special historical, cultural, and economic importance to the community of Alert Bay. The 'Namgis First Nation has been involved in habitat restoration projects in the Nimpkish system since 1996, when they formed the Nimpkish Resource Management Board. The Board was established to give corporations, governments and others wanting to conduct business in the Valley an opportunity to present their plans - an avenue for communication (Vodden and Gunter, 1999). The Nimpkish Valley Watershed Restoration Project, a Canfor-'Namgis partnership, came about as a result of relationships established through the Board. The 'Namgis have operated the 'Namgis Salmon Enhancement Program since 1975, later opening Gwa'ni Hatchery. The hatchery is constructed and capable of rearing up to 20 million fish of different species each year, and is operated on a $300,000 annual budget funded by DFO (O2).

Figure 21 Co-management activities

	MTTC	KTFC	ICNRC	NIFC	VAB	NFN	NB
Stock assessment		l				l	
Habitat assessment and monitoring	l	l	l			l	
Habitat protection, restoration	l	l	l			l	
Stock enhancement		l				l	
Enforcement of harvesting		l					

Setting harvest targets		m				m	
Deciding on time/area of openings							
Allocation/licensing		l					
Product marketing		m				m	
Policy making - Decision making - Lobbying	l	m l		m	l	m l	
Education/communication		l	l	l	l	m	
Other? - Funding fisheries projects - Training		 l		l l			l

Symbols:

l = Yes (Medium to high degree of activity); m = To some degree (limited or low to medium degree of activity); where no symbol is present there is no evidence of this strategy being used.

Fisheries education programs in the community range from public workshops held by organizations such as KTFC and ICNRC to classroom incubators located in both Alert Bay elementary schools (DFO, 1995). KTFC Aboriginal Fisheries Guardians also fulfill a public education function, sharing information about fishing restrictions for example with harvesters on the fishing grounds. The ICNRC, a regional research, education and information centre has run public education programs (workshops) on a range of fisheries topics, including adding value to seafood, regional fisheries management, shellfish aquaculture, coastal resources inventory and traditional uses, and marine research needs and opportunities (ICNRC, 1998). The Centre has also gathered information on the state of most fish bearing streams in the region and other fisheries topics and provides a non-political forum for dialogue and information exchange in an arena typically charged with conflict. Like NIFC, ICNRC is a partnership of various interests - regional and local governments, First Nations, the fishermen's union (UFAWU), community organizations, educational institutions and others in the region.

Input into fisheries policy development has been a major goal of many organizations (e.g. MTTC, Village of Alert Bay). Representations to policy-makers are made both directly by municipal and First Nation governments and through regional/multi-First Nation organizations. However, it is felt by interview respondents that little impact has been made with lobbying and consultation efforts and that attempts by senior governments to involve or "consult" local organizations have not been genuine. The degree to which local involvement has truly been "co-management" is discussed further below (Section 5.2).

5.1.2. Vision for the Future

> I would like to see Area 12 managed in large part by Area 12 people (R2).
>
> We discussed the need for regional management of fishery resources and agreed that this approach is essential to both community and resource species survival…

- Oct. 1998 letter to Fisheries Minister David Anderson,

signed by 'Namgis First Nation, Village of Alert Bay, KTFC, NIFC, ICNRC,

MTTC and other North Island fisheries interests

All those who were interviewed during the course of this study felt that their organizations should play a greater role in fisheries management, although one Village of Alert Bay representative cautioned that the municipality should only get more involved if they are provided with advice from "competent local people". A local fisheries biologist was named as an example. In part the desire of local organizations to get more involved in fisheries management is a response to cutbacks in DFO and the perceived inadequacy of the current management system. There is seen to be an immediate need to fulfill management responsibilities no longer being met by DFO:

> There is no stock assessment for herring in this area, one of the primary producers of the food chain and the DFO has decided that they don't have any money to do stock assessment for herring because its not commercially viable as a fishery. They don't seem to think of the fact that's its incredibly important in terms of the food chain. So there's no stock assessment for herring in all the mainland inlets. And in fact there's very little stock assessment for salmon. There's almost virtually no knowledge of the standing population of the resident species of trout, very little stock assessment effort if any in this area. Even on clams, which should be an obvious marine resource. So, yes, the community should become more involved in stock assessment (O2).

> Up until about 1965 or 68 there were 21 patrol men with full enforcement powers in area 12 alone… And they would do all of the stock counting and habitat impact stuff. The total has died and dwindled. We're down to 4 very short term seasonal patrol men (O2).

> We've increased the numbers of Chinook and Coho through enhancement, but the recreational catch is not monitored, the lodges and camps (T1).

In addition to helping meet immediate management needs, respondents believe that increased local involvement in fisheries management would provide a range of long term benefits. These benefits include: greater local knowledge and sense of stewardship, ownership and responsibility; increased access to resources for local residents (with resulting employment and consumption benefits); rebuilding the stocks; better decision-making and management (including longer term solutions); better information through the use of local knowledge; and higher compliance with management decisions. It was felt that local decision-makers would tend to be more accountable than senior governments as they are closer to their constituents.

Several respondents expressed strong reservations, however, pointing out problems that would need to be overcome with local management including: conflict (e.g. difficult for local people to solve rifts between local groups, disagreements over allocation) and difficulty in reaching consensus; lack of local expertise (e.g. scientific/technical); and the potential for money/greed to rule decisions. The benefits and challenges of co-management demonstrated in the case study are discussed further in Section 5.3 - Results of Co-management.

How Regional Management Would Work

It was generally agreed that for co-management to become a reality a regional fisheries management board structure, consisting of representatives of various interests in the fishery from throughout the region, would be required. Although it was agreed that such a board should be inclusive and broad-based, there were some differences of opinion as to how decisions would be made within the board. Regional management models, and their decision-making mechanisms, from elsewhere have been investigated by organizations such as NIFC, KTFC and ICNRC. One respondent argued for a consensus model where:

> we together, put our heads together and go through it... And we have someone in the middle saying "well I hear what you guys are saying…". That to me is consultation. … In our language we have a word, 'Nanwakola. It means "putting the minds together". We must not leave this room until we reach consensus.... (N2).

Another advocated that:

> everyone would have input and someone would make the final choice, a dispassionate but involved person that has an understanding of it. If you were asking me for names I would hand it to someone like Don Cruickshank, who knows the fishery, someone who has a stake and a long history (V4).

Both suggestions involve a mediator/facilitator, with varying degrees of authority. Yet another respondent likened it to the House of Commons and the mediator to the Speaker of the House. In its proposal for an Area 12 Shellfish Management Board, the MTTC suggests a decision making

structure that strives for consensus but, in the absence of consensus, accepts a double majority —

that is a majority of First Nations representatives and a majority of other representatives. Further, each First Nation would have veto power within their territory (sub-area) (MTTC, 1998). NIFC follows a similar model. Decision-making mechanisms would clearly have to be discussed and agreed upon by all participants should a regional fisheries board be formed.

Role of the Study Organizations in Regional Management

Respondents generally felt that their organizations should play a greater role in all aspects of fisheries management. There was some disagreement, however, on the extent to which local organizations should be involved in: enforcement; deciding on time and area of openings; harvest planning; and seafood marketing. One respondent, for example, felt that "enforcement should be an outside body. Therefore you're not letting your friends go through" (V1). Most, however, felt that the concept of self-policing was a viable one and pointed to the success of the Aboriginal Guardian program as an example. Similarly, while a few respondents felt that locals should not get involved in harvest planning and fishing openings, others felt that they could not do a worse job than what was currently being done by DFO, who, they claim, determine openings based on rigid models, budget considerations, corporate priorities and politics - rather than biological realities.

There was a strong consensus that restoring fish stocks, through activities such as enhancement, monitoring, assessment, and habitat restoration, is the number one priority for community involvement: "There's a lot of work to be done to bring back the fish in our streams and watersheds" (N4). One respondent pointed out the enormity of the job at hand:

> the project has been going for 2 years, but again all we've done so far is some preliminary habitat assessment … probably less than 5 % of the total land area in the Nimpkish drainage system… there's 64 major spawning streams in area 12, statistical area 12 it is referred to, that we really haven't done habitat assessment on… most of the spawning is in off channels, small channels, small tributaries. Those small tributaries are not mapped at all …only the main water courses. So you've got huge areas that were logged across through up and down and really don't appear on the map. And so there's a monstrous pile of work to go through and enter those on the map… literally thousands and thousands of kilometres of unknown enhancement…(O2).

Respondents also felt strongly that local governments and organizations should have a greater say in policy making, pointing out that federal policies such as individual vessels quotas "are hurting our industry and our people…These guys that are holding licenses are sitting on their couches making nothing but money off our fish" (N6). "Quotas mean less jobs per boat and more money for the skippers " (N1). "Why we're losing our abalone" N6 added "is because of the sea urchin and sea cucumber licensing formula that DFO put in."

Role of Senior Governments

Strong feelings of dissatisfaction were expressed by interview respondents about the current management system under the control of DFO: "My people don't want nothin' to do with DFO" (N2). "Their unlawful assumption of jurisdiction has presided over the severe reduction of many species and the destruction of critical habitat" (KTFC; 1998; 6).

However, most agreed that there is an ongoing need for federal involvement in the fishery. They envisioned a regional management system where DFO would act as an overseer, intervening when conflicts could not be resolved at the local level and monitoring to ensure the interests of conservation, product quality and others outside of the region (e.g. in neighbouring regions) are being met. Another important role for the federal government, according to Alert Bay community leaders, is providing assistance with developing local capacity for management, in particular by providing information, funding, and training in management and technical skills, and in providing ongoing advice on science/biology, statistics and population modeling. Several respondents also felt that DFO should play an ongoing role in enforcement. Others felt that DFO involvement would be

beneficial in setting harvest quotas, deciding on opening times, international trade, and watershed restoration.

Respondents were less certain about the involvement of the provincial government, traditionally involved in freshwater fisheries but a relatively new player in the management of marine resources. Some showed appreciation for recent attempts by the Province to intervene in federal policy decisions and consult fishing communities on their actions: "Corky Evans (ed: Provincial Fisheries Minister) on the other hand is a good guy. At least he came to my village..."(N2). "Give them a shot at it." Others felt they should have limited involvement only, if any: "I'd like to see that proceed a little bit carefully, so that the provincial ministry concentrates for a start more on the habitat and fresh water end of things" (O2).

Who Else Should Sit at the Regional Management Table?

> We discussed at length the representation needed on a Regional Advisory Board that would incorporate all governments and fisheries interests in the region: First Nations, municipal and regional district governments (including economic development and tourism), commercial fishermen and displaced fishing workers, long-time local residents and salmon enhancement groups, commercial processors, commercial and recreational sport fishing interests, and local resource management agencies and organizations…

- Oct. 1998 letter to Fisheries Minister David Anderson

There are some general areas of agreement among Alert Bay organizations and representatives as to who should be involved in a regional fisheries management structure. However, areas of disagreement remain and because there has been no concrete discussions held to date on the establishment of a regional board, consensus has not been reached on the issue of representation.

There was no disagreement among respondents that First Nations should play a central role (see Taking into account Aboriginal rights and title below). There was also strong support for the involvement of communities: "It should be the Village and the First Nations. Both of them should be involved in the management of this area" (V1). Several respondents felt that community groups could be involved through their local governments. Some reservations were expressed, however, about the involvement of local government:

> I don't know if we have the expertise to do fisheries management, it's a complex issue, so probably not … I think we have local people competent for stuff like that. *** comes to mind and if we could use good information from people like *** I'd be more comfortable about it, but I don't think we as politicians are any better equipped than a federal politician (V4).

> … politics doesn't have any room at the table… if the local government rep happened to possess knowledge that was good for that process that would be fine, but I'd hate to see the status quo, really we're just managing based on community economic need for example, some of the statements that our mayor makes about how we should manage the fishery and how we should open and all the rest of it are just really good from a political economic point of view… but they just stink from a biological perspective (O2).

Other stakeholders that might be involved are fishermen, community organizations, conservation groups and fish processors. Most respondents agreed that fish harvesters (including sport fishermen and crew members), particularly those from the local area, should be involved. Some felt it was a priority, while others expressed caution about passing too much control on to license holders:

> I would think there would be different gear type representatives on the board… I'm talking about area harvesting licenses. So in terms of representation on the management board I would like to see the local people managing and looking after that resource, them also being the ones to harvest it (O2).

> I think they should have an advisory role, I don't think they should be making a final decision because of their vested interest …more on economic rather than long term (V4).

There was some disagreement as to whether conservation groups should play a role. The involvement of outside conservation organizations such as Greenpeace was strongly opposed by several respondents. The involvement of local conservation and stewardship

groups, however, met with considerable support.

> I'm dead against people like Greenpeace coming in and telling local organizations what they should do…local conservation groups should be listened to and they should have a say in what's happening (V1).

One respondent suggested that conservation groups act as an essential "barometer" for ecosystem health.

Involvement of fish processors met with significant opposition, however, several respondents offered qualified approvals. Again the involvement of local, rather than externally controlled, processing firms was preferred.

> I think the processors call the shots more or less ... and when they want an opening they tell DFO, and DFO does it ... They should have a little bit of say, but they're controlling it now (N1).

> In a responsible way, yes, all these companies that are feeding off the resources have to put something back in, dollars or education, they have to be involved… (R2).

> … certainly if we had local processing, yeah they should be there because they're part of the equation (O2).

The vision described also involves the general public, keeping them informed and ensuring avenues exist for their input and participation. Although board members would be representatives of selected organizations and governments, many respondents agreed that the community at large should also play a role in regional management. "It should be a broader influence than just the Bands or the Chiefs" (T1). "I think the community as a whole should play a much greater role in fisheries management" (T2). It was suggested that this could be accomplished through communications, public forums and committees. Education programs (e.g. about conservation issues) would be needed.

Greater public knowledge about the state of the fishery and fisheries management issues, one respondent pointed out, would also help fishermen be more realistic about their expectations of the fishery and fisheries management: "If everyone is made aware of it, at least they have an opportunity of knowing instead of false ideas and false hopes" (V2). "Rather than having the boogy man downtown being criticized as the manager, if people were involved in the process, including fishers, in the process of making decisions, they're your decisions at that point, you're part of the resource, part of the extraction, part of the protection" (O2).

Overall the vision, while not refined, is one of a relatively inclusive regional management structure: "you'd have to have lots of players involved to satisfy everybody ... keep in touch with them" (N1). "I think the involvement should be broad based, but not to the point that you get people who don't really have a stake in it making decisions, I think they should be targeted to the people who have something to lose" (R2). Priority is given, however, to local rather than outside interests.

Taking into Account Aboriginal Rights and Title in Regional Management

> We agreed that the issue of negotiation with First Nations is paramount to the successful building of regional partnerships in fisheries management. This is an axiom that has been dictated by the courts in Delgamuukw. This concept has been forefront in the building of the partnerships herein described." - Oct. 1998 letter

The fishery is important for First Nations peoples in Alert Bay for many reasons. It is a source of food, employment and income. It has ceremonial and social significance. Teaching the methods and rules associated with resource harvest to younger generations is one of the key ways Aboriginal culture is sustained (Weinstein and Morrell, 1994). Legal decisions in the 1990s have recognized the priority of Aboriginal food fishing rights over other uses of the fishery resource. Not only have Aboriginal rights to harvest not been extinguished, but First Nations have also not relinquished their rights to manage the resources of their territories sustainably, a responsibility they claim accompanies the right to harvest.

> Non-Aboriginal governments claimed a responsibility to govern the marine and other resources of our territories unlawfully and without any effort to negotiate with the Kwakiutl who had exercised their governance rights and responsibilities since

> time immemorial (KTFC, 1998; 6).

First Nations, therefore, are not merely another "stakeholder" at the local level but a level of government with specific legal as well as traditional/cultural rights and obligations. This special relationship must be taken into account in the design of a regional management system. If not addressed in a manner acceptable to all, the potential for conflict and deepened divisions exists. Differences of opinion among interview respondents about the issue of Aboriginal representation in regional management are illustrative.

Some First Nations organizations and their representatives express the opinion that fisheries in the region should be managed primarily by First Nations:

> ... our main dream is that someday we would own and manage maybe Area twelve and thirteen. That's the ultimate goal to manage the commercial fishery… I think the Fisheries should be moving out and the KTFC should take over management. But you see that's our dream, our goal is to manage all of them (N2).

As a result a proposal to form a shellfish management board for the region made up of at least 90% First Nations people was submitted by the MTTC in 1998. This met with calls from locals and DFO for increased inclusion of non-Natives:

> Like I say the clam issue that's going on right now, the local clam committee...they want to broaden it to have other communities involved, like Port Hardy. They want to come in a big group...the mainland people mainly. They're saying the people, the white people are diggers too. So sure they can have a seat at the table but the majority has to be the people who actually live out there and have a land claim on it... (N1)

Other First Nations representatives recognize that both segments of the community need to have a significant voice in regional management:

> There's a tendency to become selfish once you get a good ruling in the Supreme Court (T1).

> Natives are eventually going to get a bigger allocation … that was a shocking meeting because they said yeah, we know that … fishers, gill-netters, trollers, fish farm people and people in the sports industry, they all know it's coming down. But you know I think if we get a bigger role in that it would make us feel better, but there has to be a role for those people (N1).

The challenge is find ways to work together while recognizing the special rights and duties of Aboriginal people to land and resources. Respondents suggested various ways that this might happen. Settlement of treaties was considered paramount. Other suggestions included board membership of 50% First Nations and 50% non-First Nations representatives such as that of NIFC, building greater mutual understanding and respect, and the establishment of protocols for collaboration:

> … local involvement by joining these community fishery projects is a start, I think, in the right direction. And the way this one (ed.: NIFC) is coming up is unique because there's half First Nations and half regional people on the board. So you've got a good mixture there. That's a good indication of good protocol for the future. If you're really sincere and want to work together this is the best route to do it. Racism has been a big problem in our communities and if you can let that go and remember who your real enemy is… (N6)."

> To me, as an Indian, a treaty is a treaty of peace, where we can work together in harmony, or co-management (N2).

The KTFC (1998; 6) is "devoted to resource management and development based on the principle of sharing and co-existence", provided that Aboriginal title, rights and responsibilities are recognized and has stated a commitment to work with non-Aboriginal neighbours and governments as long as the relationship is respectful.

Statements, such as that included in the MTTC shellfish proposal, which clearly state that interim agreements and partnership arrangements are without prejudice to Aboriginal rights and title have also been used. Finally, on the west coast of Vancouver Island

(Nuu-chah-nulth Regional Aquatic Management Board), interim measures agreements have been established to facilitate regional management while treaty negotiations are underway. Alert Bay organizations have given consideration to this model, recommended for arrangements with the potential to undermine treaty negotiations by the BC Claims Task Force in 1991 (Nuu-chah-nulth, 1997). Like NIFC, the Nuu-chah-nulth Regional Aquatic Management Board also consists of 50% First Nations membership.

What Do They Call Their Vision?

When asked which of several terms often used for community involvement in fisheries management - partnerships, co-management, cooperative management, joint management, community-based management - they were most comfortable with, interview respondents opposed the overused terms partnerships, co-management and consultation. Of the choices given community-based or joint management were preferred.

> The word co-management is a swear word. Co-operative management is a fairly good term used in the right context. Partnership is a swear word. Community based fisheries management means that everybody's involved and that, in so far as fisheries are concerned, that would probably fit (V1).
>
> Natives like to joke ‘if you cooperate we’ll manage’ is what the white man says, so that’s the way it is right now. That’s what they’re saying right now, let’s call it co-management...(N1)
>
> ...if I came to your meeting to listen to your lecture...you call that consulting? It isn’t. Consultation also isn’t a good word…(N2)

The term most commonly used by the respondents themselves was regional management. In the end they pointed out, however, "words don’t matter, it’s the intent (N5)."

The Issue of Passing Stocks

Several respondents pointed out that regional management will be significantly more difficult for migratory or passing stocks, such as salmon. Many thought, however, that regional management could still work, particularly with an overseer such as DFO to ensure the needs of all regions are met. Some agreement on allocation (e.g. % of historical Fraser catch) would also be needed. However, it was felt that sedentary stocks represented a logical starting point:

> We would rely on Fraser fish. So there’s all the group between the Queen Charlotte Islands and the upper Fraser river that rely on those fish, so how would we be able to make a decision for the best benefit of the fish when somebody 20 miles down the line is going to be making the decisions themselves? So when you get into that you’re looking after your own interests and the fish don’t get looked after too well, potentially (V4).
>
> Passing stocks… I don’t think it’s impossible, I could see something like a regional manager or board… local stock management board that would look after those concerns with input or assistance from DFO biologists or marine biologists, and then submit stock management plans… this area management board may have to get together with 2 or 3 other regional management boards and then decide together on Fraser stocks (O2).
>
> If you’re talking about shellfish… you get a stock there and you can manage it, they don’t move or migrate from your area, I could see a community managed fishery for non transitory stocks, that would be the one that I would think would ultimately work… then the herring are something else all together, they’re sort of transitory but not as much as salmon, I think they could be managed by a regional body (V4).

5.2. Examining the Current "Co-management" Process

5.2.1. Level of Public Involvement: Is this Really Co-management?

In Chapter Three four levels of public involvement were identified: 1) information/ education; 2) consultation; 3) shared decision-making/joint planning; and 4) shared management responsibility/delegated authority. On the extreme ends of this continuum are "no local involvement" and "exclusive local control". Community involvement in fisheries management on Cormorant Island lies somewhere in between these two extremes. For the most part involvement in decision making has not gotten past the level of consultation, however, and locals question whether even consultation has been genuine:

> Consultation and cooperative management only work if there's two voices, not one voice talking down to native people (N2).
>
> .. really, in the end, none of that happens. The Department of Fisheries and Oceans is the guy with the big gun. What he says happens (T4).
>
> The consultation process currently being conducted by the Partnering Panel is seriously flawed. The time frame given for consultation in British Columbia was far too short to allow for meaningful discussion and input. Background materials, particularly regarding proposed changes to the Fisheries Act, were not distributed in advance…
>
> From October 22nd letter to David Anderson

DFO is generally seen to have adopted a "patronizing and superior" attitude (KTFC, 1998; 6) rather than a relationship of respectful partnership.

With much of the funding coming from DFO, completion of management tasks such as enhancement or assessment appear to be viewed more by the Department as service delivery by the local organization than a true sharing of management responsibility (e.g. level 4 relationship). The 'Namgis Salmon Enhancement Program provides an excellent example. Although the priority for the 'Namgis has always been the production of Sockeye and Chum, DFO priorities have led over the years to an increased focus on Chinook and Coho (Vodden and Gunter, 1999). The surplus fishery has been similarly restricted by DFO policies:

> Yeah it's, it would work if we're allowed to do what we want to do but it's restricted a lot by the governments, the DFO … we're not allowed to process and market ... You can only catch uh, I think it was ten thousand, fifteen thousand out of a hundred fifty thousand. I guess the surplus would be about fifteen thousand. But we more or less *have* to go along with the management plan they give us. We do it for now on their terms ...

It appears, therefore, that the level of Alert Bay's real decision-making power in fisheries is limited to a few representatives (KTFC and 'Namgis) on the South Coast Advisory Board, an advisory body to DFO on harvesting plans.

It should be noted that observations about DFO were generally targeted to senior staff (and the Minister) outside of the region. Local organizations appear to have established a good working relationship with local DFO staff through their co-management efforts.

In several cases the Province of BC has been more sincere in their attempts to consult North Islanders and share decision-making responsibility than DFO. The Province initiated both the Vancouver Island Commission on Resources and the Environment (CORE) and, more recently the Central Coast Land and Coastal Resource Management Plan (CCLRMP). These processes have involved a range of interests from the North Island in making land use decisions. A parallel process was established for First Nations input to the CCLRMP, recognizing their unique rights and relationship to the land and marine areas in question. The Mount Waddington Community Resource Board was formed out of the CORE process and serves as an advisory body to the Province that some say has been effective at providing local input into provincial policy:

> People have learned a lot. The aquaculture representative has sat across from forestry for two years. These people are resource to the community now. They've also influenced provincial policy (R1).

The Province has also partnered with the KTFC as a referral agent for Crown land applications, fulfilling their legal obligation to consult First Nations. "The referral system is a good thing ... if we didn't have a referral system how would we know what was happening? Like right now the referral system says they have to call us, they have to tell us what their plans are" (N2). Finally, funding decisions made on behalf of Fisheries Renewal BC, a crown corporation, have been delegated to a local body. No substantial control has been transferred in forestry, freshwater fisheries management or wildlife management, however, and the Province has little authority to delegate in the marine environment.

Disputes with senior governments over management of, and access to, natural resources in the Kwakwaka'wakw territory are longstanding. In the end, however, the provincial and federal governments have retained their power to make decisions on the resolution of these matters. Despite treaty negotiations, the Delgamuukw decision, and public demand for more participatory management and decision-making, with the exception of regional-scale land use planning, this situation appears to have changed little.

According to literature review findings true co-management takes place when community involvement reaches levels three and four of the participation continuum. Co-management, according to this definition, is not really taking place on Cormorant Island. Nevertheless the community continues to try to move the process in the direction of increased local control and, in fact, some level co-management is taking place whether senior government recognize it or not. Local organizations are fulfilling management functions that were once DFO's responsibility. The Nimpkish Resource Management Board, with representatives from both DFO and MELP, may represent a breakthrough in joint management of natural resources, including fisheries, at the sub-regional level. It is too early to tell, however, what, if any, authority this Board may have. Barriers to establishing a true co-management relationship and to fulfilling the regional management vision, are discussed further in Section 5.4 below.

5.2.2. Recommended Process Design Steps

For the most part co-management in Alert Bay today consists of a series of projects and programs rather than an ongoing, regionally integrated co-management process. Although the aspiration or "vision" is to move in this direction it is very early in process. Actions to date correspond with only the first four of more than 20 recommended steps for phase one (preparation) of a co-management process. Initial discussions about the possibilities for regional management have been held between some of the key organizations in the region (e.g. the November 1998 NIFC-hosted workshop). Research has been done on models from other communities, particularly the Regional Aquatic Management Board (RAMS) on the west coast of Vancouver Island, and presentations made by RAMS representatives at several local workshops. Finally, discussions have begun to identify the major interests that should be represented in a regional management system.

The process of establishing the NIFC represents a beginning at identifying interests in the fishery within the region as well as representatives from those sectors that now participate in the NIFC Board of Directors. Not all sectors are represented, however, and the NIFC's current mandate is narrower in scope than the vision for regional management described above. A full process for designing a new management structure will be required if this vision is to become a reality. In the meantime valuable skills and experience have been gained by individual organizations as they continue to work on their piece of the overall management problem.

5.2.3. Principles of Fisheries Co-management

Principles of co-management and genuine public involvement processes can be divided into two basic categories: principles of representation; and principles of process. Compliance with these principles within the fisheries management efforts that are underway in Alert Bay are examined below, along with the degree to which these principles have proven to be important within this case study.

In most cases, it is difficult to assess if these principles are being followed because a true co-management body and process has not yet been established. Conclusions about principle compliance therefore are tentative, even predictive, and are based both on observations of the projects and programs now underway and the vision for the future described by interview respondents and supporting documentation. Results are consolidated for all organizations.

Integrity of Representation

Respondents indicated that many of the principles of representation identified in the literature were important to them. Overall, organizations have pursued the principles of representation "to some degree" (see Figure 22). As discussed above, respondents advocated

broad-based membership in a regional management board as well as avenues for involving the community at large. Organizations such as NIFC, ICNRC and the Nimpkish Resource Management Board have worked to include representatives from a range of interests on their boards. Respondents and others in the community expressed concerns, however, that some organizations are not as broad based as they should be, or information shared openly enough with members and the public. Therefore, organizations were found to comply with the principle of inclusivity "to some degree". This is consistent with findings regarding compliance with the principle of broad-based public involvement in other sectors of CED activity. Respondents valued the concept of community involvement and local stewardship highly. Organizations and governments have demonstrated a commitment to stewardship in their own actions, but have not made significant efforts to encourage acts of stewardship and participation by citizens.

Figure 22 Principles of representation

Important	Pursuing?
Broad-based participation/inclusivity	l m
Appropriate and equitable representation	l m
Central role for fish harvesters	m m
Accountability	l m
Community involvement and local stewardship	l l
Voluntary participation	m l
Up-front involvement	l m
OVERALL	l m

l = Medium to high level of activity in support of this principle; m = Limited or low to medium degree of activity; where no symbol is present there is no evidence of activity in support of this principle.

The issue of appropriate and equitable representation in any co-management body is considered critical in Alert Bay. Although this is particularly an issue within the First Nations community: "the playing field has to be level with 50% Indians and 50% white, not just one seat (N2)", it also applies to other sectors. The issue of appropriate representation has been given considerable thought and resolved by different groups in ways that are reflected by the makeup of their various boards and committees. As discussed above, however, no consensus has been achieved to date on a region or community-wide basis on what constitutes appropriate or equitable representation in a regional fisheries management body. Therefore, further work in this area is required.

Case study results confirm that in order to achieve balanced representation, the issue of who should be represented must be decided, and the key players invited to participate, early in the process (upfront involvement). Initial failure to seek adequate First Nations representation has resulted in low First Nations participation in the Mount Waddington Community Resource Board, for example.

> It is difficult to get First Nations to the table. There’s just too much on the go. They were upset originally, understandably, because they were offered only one seat. So the CRB made an offer to accept applications from any Band for a seat. We didn’t get any (R1).

It appears that a lesson has been learned, however, from the Resource Board experience and others like it. Organizations such as NIFC and ICNRC spent considerable time and resources in their initial planning phases seeking representation from appropriate stakeholders, communities and First Nations.

Participation in co-management in the community is generally voluntary, with the exception of paid staff members. Organizations select projects and programs to pursue and are governed by volunteer board members. Voluntary participation was raised as an issue only with respect to the Gwa'ni Hatchery. Efforts of the hatchery, in terms of what species are raised, have been influenced by DFO priorities and,

therefore, are not all voluntary efforts of the 'Namgis First Nation. In some cases Chinook and Coho have been raised as a means of securing the necessary funds to address community priorities (Sockeye and Chum production). Dissatisfaction with this arrangement was expressed by respondents, although permission has been received to increase Chum production levels in recent years.

Finally, the principles of accountability and fish harvester involvement were seen by respondents to be both important and linked. Respondents generally agreed that harvesters play an important role in co-management, some disagreed that role should be central, however - advocating instead a balance of control and representation on the management board. It was pointed out that commercial fishermen "did a pretty good job at conservation until global warming and new players like the sport fishery came along" (N6), but that mechanisms for accountability are necessary due to their vested interest in the process. Some respondents suggested, for example, that fishermen who had represented the community on fisheries matters in the past had been in a conflict of interest situation:

> Everybody who we sent to Ottawa to fight for us came back with a pocket full of money and the story ‘We tried our best but sorry, you guys ain’t going fishing, we are gonna double-license’. It’s a corrupt system (N2).

Conflict of interest guidelines are required for fishermen, and others. Another example where such guidelines would be beneficial is licensing and allocation decisions involving family members:

> Well we have a licensing board but I try not to deal with it 'cause I feel that I would lean toward my family. And it’s not because I’m dishonest, it’s just that I’m honest the way I feel … I try to avoid any conflict (N1).

In addition to conflict of interest guidelines, it was suggested by some respondents that representatives who are elected (e.g. Band or municipal council members) are preferable to those that are appointed as they are more directly accountable to their constituents. Others felt, however, that elected representatives may have priorities they consider higher than biological ones (e.g. "the town is hungry") and that people knowledgeable and concerned about the biological premises were also needed to keep the politicians accountable. Ensuring representatives report back regularly to the body they represent and their general membership was seen as a third mechanism for enhancing accountability - one that has been practiced to a limited extent to date.

Integrity of Process

Many of the principles of a good co-management process are being followed "To some degree" in Alert Bay. Others are not, due to significant barriers that stand in the way of compliance (see Figure 23). Training, education and capacity building have been an ongoing focus in fisheries co-management, as is the case for other types of CED activity in the community. Trust and respect are seen to be important factors and areas for further improvement if relations between the various segments of the community and organizations involved in fisheries management are to be strengthened. Sharing of authority, rights and responsibilities is seen as important and being pursued to some degree, but is perceived to be difficult if not impossible to achieve given DFO's unwillingness to relinquish control (see Section 5.4 below).

Figure 23 Process principles

Important Pursuing?

Capacity building and education l l

Respect for other participants l m

Sharing and delegation of authority l m

Shared rights/roles and shared responsibilities, l m

balance between benefits and costs

Open and transparent process l m

Purpose driven ? l

Consensus-based l l

Self-design ? m

Trust and sincerity l m

Quality information l m

Integration of local and scientific knowledge l l

Realism, affordability l m

Monitoring and follow-up/process flexibility ? m

OVERALL l m

l = Medium to high level of activity in support of this principle; m = Limited or low to medium degree of activity; where no symbol is present there is no evidence of activity in support of this principle. ? = response not available (conflicting or insufficient evidence).

Concerns about open access to information and transparency have been discussed above, along with the community's desire to make decisions on a consensus basis where possible. Efforts are generally purpose-driven, setting out to accomplish specific objectives. This is often a requirement for funding. Quality information is acknowledged to be important but lacking. Efforts have been made by local organizations to improve the information available about fisheries stocks and habitats in the region, using both traditional and local forms of knowledge. The importance of affordability is also recognized by all organizations, as they struggle to raise sufficient resources for their efforts. Their ability to comply, however, is limited by restrictions on their ability to raise revenue from the fisheries resource (see Section 5.4 below). Finally, monitoring of enhancement and restoration efforts takes place in the form of stock assessments. Organizations evaluate their overall effectiveness in fisheries management less frequently. The MTTC shellfish proposal calls for a monitoring program that includes an evaluation of the process after two years and of achievements after five years (MTTC, 1998).

5.3. Results of Co-management: Pursuing the Principles of Sustainable Fisheries

> There's an awful lot of minor species that haven't been explored yet, at this point I don't think there's avenues for doing that, but if those resources are managed the way pacific salmon has been by politicians rather than communities or biologists than there's no hope for sustainability (O2).

According to interview respondents the fishery as it is managed to day is not sustainable: economically, socially or biologically. Evidence of job loss, reliance of remaining fishermen on alternative income sources, stock depletion, habitat damage and community distress supports this claim. The purpose of this section is to examine to what extent co-management has increased the degree to which the principles of sustainable fisheries are followed in the Alert Bay area (see Figure 24).

5.3.1. Restoration and Maintenance of Natural Capital

Local enhancement and restoration efforts have helped restore fish bearing streams, the salmon runs that return to them and, therefore, natural capital. One respondent provides an example:

> We moved the dams there, stabilized the lake levels. So from a 0 Coho return for 38 years, we have restocked that stream and probably have on average 40 to 45 thousand adults returning each year (O2).

However, less has been achieved in the direction of conservation through improved harvesting techniques. A current policy direction for the protection of threatened stocks (maintenance of natural capital) is selective fishing technologies. Some respondents argue that local fishermen comply willingly with selective fisheries policies and technology changes and are supportive of these measures. Others argue it is unnecessary and harmful to the commercial fishery. Respondents argue that brailing, a selective fishing technique now mandatory for the seine fishery, is ineffective due to high mortality rates of released fish and low bycatch of Chinook and Coho (N3). Studies have shown, however, that this is not the case. A local fisheries biologist pointed out that the incidental catch in Johnston Strait in 1997 "in Area 12 alone was somewhere over 16,400 Chinook juveniles that didn't swim away, and the ones that did swim away were floaters." He adds, however, that with local knowledge this problem is manageable, stating that there are well-known areas where juveniles can be found that could be voluntarily avoided. Further studies have shown that when conducted properly brailing and release of seine caught fish can result in mortality rates below ten percent (Gallaugher, 1999).

Figure 24 Co-management contributions to sustainable fisheries principles

Is co-management contributing to…

1. Restoration and maintenance of natural capital m
2. Ecosystem approach ?
3. Self-reliance and community control m
4. Intergenerational equity l
5. Precautionary and anticipatory approach m
6. Integrated l
7. Full cost pricing m
8. Efficient resource use m
9. Diversity l
10. Economic viability m
11. Participatory l
12. Responsive, adaptive and effective planning and management m
13. Cooperative l
14. Linking scientific and local/traditional knowledge l
15. Equity and fairness in sharing costs, benefits, responsibilities m
16. Adjacency and recognition of historic dependence l

OVERALL l

l = Medium to high level of activity in support of this principle; m = Limited or low to medium degree of activity; where no symbol is present there is no evidence of activity in support of this principle. ? = response not available (conflicting or insufficient evidence).

The KTFC has experimented with fish wheels, primarily for stock assessment rather than harvesting, with limited success (for mechanical and political reasons). One respondent explains his hesitation:

> Well, fish wheels, again, it's a good idea... It wasn't until the guy behind me said "what about the commercial fishermen, what's going to happen to the licenses?" Selective fishery, that's a hard one cause if you could, it would be good, but if we were to agree to it, we're agreeing to compromising the fishery (N2).

Another complaint against fish wheels and terminal fisheries in general was that there is a potential to create a monopoly of a common property resource to one particular user. Memories of BC Packers' exclusive rights to harvest on the Nimpkish River return. An analysis of jobs created/lost and other socio-economic impacts of the fish wheel technology may indeed demonstrate that other selective fishing techniques would be preferable. This analysis has, however, not been done. Instead the KTFC, along with other Alert Bay organizations, have chosen not to further pursue selective fish harvesting.

3.5.2. Diversity

Through the KTFC diversity in the fishery has been increased. In a community that once relied almost exclusively on salmon to support its commercial fishery, the organization has obtained licenses for roe-on-kelp, halibut and shrimp, and is pursuing opportunities in sea cucumbers (Alfred, 1999). Community representatives acknowledge that they have been reliant on the salmon industry and have to look for new avenues now, both within and outside the fishery. The connection between economic diversification activities in other sectors and the health of fisheries resources is also recognized: "fisheries resources are mainly a food source, they don't have to be the main focus for job creation" (N4).

5.3.3. Efficient Resource Use

Although concrete results to date are few, local organizations are also striving to encourage more efficient use of the fisheries resource use by seeking value-added opportunities. KTFC, for example, has investigated the possibility of distribution of seafood products to a restaurant chain. ICNRC has held workshops on ways to add value to seafood. In the end it is hoped that both diversification and value-added will help make the fishery more economically viable. Economic viability of management has also been addressed but significant policy-related roadblocks have been encountered (see Section 5.4 below).

One issue that has not been addressed by the community, however, is quality (other than presentations on the topic sponsored by the ICNRC). Maximizing the economic benefits of the fishery means getting the most jobs and highest value possible from the resource. It has been identified that Fraser River salmon are in top condition as they pass by Alert Bay and through the Johnston Strait. While this represents a possible market niche, one respondent pointed out that the current practice of selling to packers, who then deliver to processors, with the product not hitting the processing line until 4 or 5 days after it is caught, does not take advantage of this potential. Others complained that harvesting practices, particularly "the way they're brought over the drum set with this new system they call the ramp" (T1), also take their toll on product quality. Finally, DFO harvesting plans do not help to facilitate a quality emphasis:

> When the fish go by here, they don't open up until the fish are gone, and then when they get down to the other end and they're all mushy and soft, they have to have a fishery kill them off. It don't make sense. You'd think that the harvesting would be done where the quality is good…that's why the fish farms are getting so much because they can produce and deliver a good high quality fish, whereas our own regulations here, it's difficult to deliver fresh fish (R2).

5.3.4. Adjacency and Recognition of Historic Dependence

Local organizations have attempted to meet the principle of adjacency and recognition of historic dependence. Increasing local benefits from local resources is a key objective of most efforts. Isolation and resulting dependency on the resources where they live are arguments for increased resource access and co-management used frequently by local groups. Some jobs have been created in resource management by these organizations, along with local fishing employment guaranteed through KTFC licenses. The ability of local organizations to meet the adjacency principle is heavily dependent, however, on DFO's willingness to provide special rights of resource access for those who live within a specified geographic area. Respondents argue that this willingness is lacking and that they are further limited by financial and information disadvantages that favour outside license holders who are able to obtain licenses for new fisheries as they become available.

Lack of resource access is seen to be one of the biggest barriers to SCED and fisheries co-management facing the community. Even the Aboriginal right to fish has not been protected or honoured, respondents argue:

> … they're limiting the licenses again on clams...you can't fish herring, you can't fish salmon, it leaves nothing. Only under section 35 of the constitution has the Indian got the Aboriginal right to fish and when you practice that they charge you (N2).

> Government policies continue to hurt First Nations communities. We can't harvest our resources. We can't even harvest the chum salmon swimming right by our door and market them (Cranmer, 1998; 7).

> We're allowed four food fish per year while American tourists can take four per day! (KTFC workshop participant)

> Over at the Nimpkish River there are too many crab traps being dropped… I think in order to have a crab trap in the Nimpkish River (ed: a 'Namgis reserve area) you should have to have a Status Card. If we don't do this, we will not have crabs as a natural resource for future generations to come (T. Cranmer, 1998; 4).

Several recent proposals meant to help address these complaints have been turned down. An MTTC proposal for residency requirements on shellfish licenses was opposed by the Department. Councillor Alan Lansdowne, in a Village of Alert Bay (1998) Brief to Parliament Standing Committee on Forestry and Fisheries, also asked for special consideration of community members in resource allocation:

> Two opportunities that I see as potentially viable for these people are Blackcod Aquaculture or Geoduck Culture. I would request that your committee recommend to David Anderson, Minister of Fisheries and Oceans that he issue a special permit to the Municipality of Alert Bay or a locally endorsed community group for one or more of these endeavors.

Again this request has not been granted. Several licenses for the community have, however, been allocated to the KTFC as recently as 1999.

5.3.5. Self Reliance and Community Control

Like adjacency, self-reliance and local control is a central principle of fisheries co-management activities in Alert Bay. "We can sustain and look after ourselves", declared one respondent. "I'd like to see communities really look after themselves, and I think we can do it…we can put the resources back if we properly manage it … "(N6), stated another. While co-management activities may increase self-reliance in the long term, however, as with other CED efforts, the community relies heavily on government funding to support their activities. Thus, government-funded co-management activities further contribute to dependency in the short-term.

5.3.6. Cooperation

Although significantly greater levels of cooperation are required if regional fisheries management is to be successful (see Section 5.4 below), efforts have been made through organizations such as NIFC to build bridges between the various interests in the fishing sector, thus increasing compliance with the principle of cooperation. Cooperation between local organizations, senior governments and scientists has also helped to increase compliance with another principle of sustainable fisheries - linking scientific and local/traditional knowledge.

5.3.7. Linking Scientific with Local/Traditional Knowledge

For Alert Bay organizations linking scientific and traditional knowledge is an extremely important principle. "The Kwakiutl people recognize the value of utilizing modern methods and science in combination with traditional knowledge and techniques" (KTFC, 1997). The KTFC have used a range of information sources to learn more about local resources, ranging from interviews of elders about traditional use to dive and beach surveys, the use of fish wheels for fish tagging and Environmental Impact Assessments of salmon aquaculture. The mission statement of the ICNRC also reflects this commitment to combining local and scientific knowledge:

> to provide a forum for North Island communities that recognizes, enhances and sustains social, cultural, economic, and environmental values by sharing the wisdom of the elders and the historical perspectives of the residents with the research and academic communities in order to promote, encourage and support responsible and accountable decisions in partnership with communities, local organizations, business and industry.

The value of local knowledge, it is recognized, cannot be underestimated. "Local knowledge is invaluable" (V3), explained one representative. Cassidy and Dale (1988; 61) point out that DFO is aware of this contribution from local groups:

> Local DFO staff have played a significant and cooperative role in the marine resource inventory and have become aware of the high quality of information the MTC staff and trainees are able to acquire. One of the most positive effects of increased native involvement in marine resource management may well be a better assessment of the quality and opportunities of British Columbia’s enormous coastal zone.

Up-to-date information on salmon runs from fishermen and local residents can also increase the ability of the management system to be

responsive to unexpected changes. This will only be effective, however, if the system is flexible enough to adjust management plans based on new information in a timely manner. Some respondents argue that DFO does not currently have this flexibility, relying too heavily for example on computer modeling.

5.3.8. Integration Ecosystem Approach

Finally, efforts to make the fishery more integrated have taken place on a number of fronts, from a multi-species approach to management, to the use of multiple strategies and pursuit of multiple objectives (e.g. social, cultural, economic, ecological). Once again, the absense of a CED plan, however, has meant that fisheries efforts are not clearly integrated with activities in other sectors - although the connection is recognized. Further, other than an emphasis on multiple species and some attention to the ecosystem impacts of industrial activities, there is little evidence to suggest that an ecosystem approach to resource management has been followed to date.

5.3.9. Summary

In summary, the co-management activities of Alert Bay organizations have contributed to a more sustainable fishery in several ways, particularly by striving to restore and maintain natural capital, speaking out on behalf of future generations, striving to make the fishery more participatory, diverse, integrated, responsive and cooperative, and, finally, by linking local and scientific knowledge. These efforts, however, have been limited in their scope and scale and are not sufficient to fully address the problems of the fishery within these areas. The information base about fish stocks and habitat in the area, while expanded, for example, is still deficient. Further, several key principles such as an ecosystem approach, efficient resource use and effective planning are pursued only to a limited extent.

Not only are local organizations unable to address all issues within local control with the resources available to them, but there are a host of external factors ranging from changing ocean conditions to federal and provincial resources policies that are beyond the capabilities of any local group, however resource-rich, to address. Areas such as economic viability and sharing of power, for example, require the support and cooperation of senior governments to pursue. Therefore, local groups have not been able, nor can they be expected to, achieve sustainability in the fishery on their own. Instead they have made contributions that attempt to move fisheries in the direction of sustainable resource management.

5.4. Factors for Success or Failure in Regional Fisheries Management

5.4.1 Summary of Factor Importance

Overall, an analysis of success factors present in Alert Bay indicates that capacity for co-management is low to medium in the community and that continuing efforts at capacity building, along with a greater commitment from senior governments, are required (see Figure 25). Senior government was the third most commonly referred to barrier to the success of SCED and co-management efforts in Alert Bay, preceded by lack of funding and training, skills and education. As with SCED, most of the factors for success or failure in co-management identified in the literature review were also demonstrated to be of importance in the case study. Factors such as hard work and dedication of a group of committed volunteers, knowledgeable and persistent leadership, partnerships and cooperation, and a strong sense of stewardship have contributed to the fisheries initiatives that local residents and community leaders consider to have been a success. These include the Scott Cove and Nimpkish Valley restoration projects, Gwa'ni Hatchery, roe-on-kelp licensing, fisheries guardian program, and the Nimpkish ESSR fishery. Poor planning, management and technical skills, insufficient funding and lack of authority/government interference, on the other hand, have been weaknesses in projects that have not been successful.

Figure 25 Co-management success factors

Important Present

1. Management area geographically defined l m
2. Traditional role of community in stewardship l l
3. Traditional authority is strong ? m
4. Local institutions & avenues for legitimate representation l m

5. Homogeneous community (and/or willingness to cooperate) l
6. Limited number of interest groups l m
7. Commitment from decision-makers and key actors l
8. Specific policies and/or legislation l m
9. People buy-in, feel they are benefiting more than paying
10. Affordability/cost (time and money) l m
11. Balanced representation l m ?
12. Educated, supportive non-active public l m
13. Leadership l m
14. Knowledgeable participants (education and training) l m
15. Process design l m
16. Volunteer and human resources ? l
17. Other

- mechanisms for recognizing First Nations title? l m

- recognition of the adjacency principle by decision makers l m

OVERALL l m

Symbols: l (important, present according to most indicators), m (somewhat important, present according to some indicators), no symbol indicates not important or all indicators demonstrate factor not present. ? = response not available (conflicting or insufficient evidence).

5.4.2 Management Area Geographically Defined

Although there has been changes over time in the area Alert Bay organizations would like to co-manage, a consensus appears to have emerged that this area is the territories of the MTTC and Kwakiutl District Council member tribes, along with the territories of the Tlowitsis and Mumtagila First Nations who are not members of either tribal entity. This area also corresponds with DFO Statistical Area 12 (MTTC, 1998). The KTFC's original mandate encompassed the entire Kwakwaka'wakw territory, from Comox to Cape Scott, including DFO Areas 10, 11, 12, 13, 24 and 27. One local leader suggests that one of the reasons the southern members have left the KTFC to establish their own fisheries program is that their territory and peoples are sufficiently different that this larger boundary was not an appropriate one. One problem presented by the need to define a management area is conflicts within DFO boundaries, which are not consistent for all species. DFO shellfish management area boundaries, for example, differ from those used for salmon management. These issues demonstrate the importance of determining appropriate and agreed upon management boundaries.

5.4.3 Traditional Role of Community in Stewardship

The Kwakwaka'wakw, and later the community of Alert Bay, have traditionally played a role as resource stewards. Stewardship is seen as the responsibility received in exchange for rights to harvest. The founding ancestors of the Kwakwaka'wakw are said to have:

> entered pacts with the supernatural beings who controlled the land, the animals, the fish and other resources. In exchange for promising to demonstrate self-control, to share land and resources with others, to show proper respect for the animals, birds, fish and trees upon which human survival depends, and to pay appropriate homage to the supernatural owners of these riches, the ancestors were given the right to use these resources and to control their distribution among their people (Speck, 1987; 68).

Today organizations such as KTFC, 'Namgis First Nation and ICNRC remain committed to the concepts of guardianship and ecological responsibility. Although many examples of stewardship activities are underway, this community strength is somewhat tempered by the apparent unwillingness of fisheries organizations to date to address the mixed stock harvest/selective fishing issue.

5.4.4 Strong Traditional Authority

Strong traditional authority was identified as a success factor for co-management in the literature review. The traditional management system of the Kwakwaka'wakw was strong at one time but has been weakened by population loss, assimilation policies and a range of other factors since the onset of European settlement. New governments and elected institutions have been created, however, that are now

widely recognized in the region. These include band and tribal councils as well as municipal and regional governments. These governments provide avenues for representation that are considered for the most part to be legitimate by the North Island public. Avenues for representation of particular community and fisheries interests (e.g. conservation, sports fishery, dive fisheries etc.) have not, however, been fully developed in the region to date. New fisheries-related organizations have been created during the study period but it has not yet been determined if any of these organizations represent an appropriate institution to coordinate co-management efforts. Organizational infrastructure for co-management, therefore, is still very much under development.

5.4.5 Balanced and Legitimate Representation

As discussed above, the issue of balanced and legitimate representation has been the subject of considerable discussion on the region and, while not fully resolved, the model of 50/50 First Nations/non-First Nation membership used by the NIFC seems to have considerable support. Representation of other sectors has not been discussed to the same degree. Some segments of the fish harvesting sector, for example, are not represented on existing boards and organizations as avenues for their representation have not been established.

5.4.6 Leadership and Voluntarism

Government bureaucracy and unwillingness to work with the community in a meaningful way, has taken its toll on leadership and voluntarism, discouraging rather than encouraging volunteer input and local innovation:

> I would say 10 years ago there was a really strong leadership, before people got so cynical...yeah there was quite a strong group 10 years ago but right now, if the minister were to come to town tomorrow and say I'm here to listen and Ill take your suggestions, a lot of these guys, including myself wouldn't bother to go. The Standing Committee was here a couple of months ago. I had the worst deja vu of my life walking in to that hall. I thought gee I've been in this hall at least a dozen times. The faces are different up there but everything else is the same. The faces out there are the same, and the stories are the same, and all the promises are the same (O2).
>
> There's a waning leadership. People are tired of banging their heads against the wall. People are very skeptical (R3).
>
> Regulatory approval has just about been impossible...It used to be if you wanted to get a community group, they'd go in to do some work on a stream and everybody's there with the intent of fixing something, so you climb on a boat you take a few chainsaws and off you go...The Ministry of Environment 's just become virtually impossible to do those simple projects. We've got a barrier of fish, they just can't get over...by god, as soon as you lift the barrier they go up the stream. But to do that you now need level one water assessment and level 2 engineering prescription design and you need a section branch permit that can take up to 3 months to get and on and on and on...a bunch of other people said to hell with it, we can't wait for government handouts and they took on a few very significant streams in the mainland and worked their buns off for about 5 months with 2 seine boats, 2 full crews, worked those rivers from one end to the other and did a hell of a good job of stream rehabilitation - and were threatened incidentally in court . DFO actually threatened them for working outside the time (O2)!

Despite declines in leadership, however, a core of committed individuals remains. As organizations the 'Namgis First Nation and KTFC in particular are seen to play a leadership role.

5.4.7 Education and Training

The 'Namgis Salmon Enhancement Program has had a considerable impact on local knowledge and awareness of fisheries biology. Many training programs have been run through Gwa'ni Hatchery, summer students hired etc. over more than twenty years of operation. Most residents have either worked directly with the Program, or had friends or family who have. The Program, along with others such as the KTFC, has had a considerable impact on local awareness and has become a source of community pride, garnering considerable support. Further, the Inner Coast Natural Resource Centre has run public workshops on subjects such as, fisheries co-management and opportunities, resource mapping, impacts of shellfish aquaculture, value added seafood processing and other related topics.

Residents also have considerable first hand knowledge of fisheries issues based on many years of living on the water and economic reliance on the fishing industry. Misinformation (e.g. about conservation issues) can also spread in a small community, however. Particularly when residents are not provided with the facts. Ongoing communications and public awareness, therefore, is confirmed by this case study as a necessary component of co-management.

> Projects such as the SEP-funded project of the Nimpkish Band, one of the Musgamagw members, have faced uncertainties concerning levels of funding that do not permit the longer term perspective needed for any significant fisheries development project. This has led to a second perceived constraint: the widespread attitude among the work force that any given project is just another make-work endeavor to which little or no personal commitment should be made. Insufficient training programs and a severe lack of knowledge about the features of the biophysical environment are also seen as important constraints...

(Cassidy and Dale, 1988; 59)

Training programs and practical experience over the years have provided the community with a relatively skilled workforce in areas such as enhancement and stock assessment. However, additional technical and scientific skills are required. Further, staff turnover has been a problem, requiring that training be provided on an ongoing basis. In part, staff turnover is due to the absence of a stable funding base. Staff have left organizations such as the KTFC on several occasions to pursue jobs with a more secure income in the public and private sector. Downloading of responsibilities, without support for capacity building, was not referred to as a concern by respondents. DFO does provide training for KTFC staff.

5.4.8 Affordability

Lack of stable funding, along with insufficient skills, education and cooperation from government, is considered to be one of the most significant barriers to the success of co-management and SCED projects in Alert Bay. Given scarce resources, organizations are well aware of the need for program and projects to be cost effective and affordable. In fact, government agencies are criticized for not managing in a cost effective manner:

> There's a big black hole showing up. 150 million a year in salaries - for who? That money could go into resource development, watershed restoration. Why is it all going to line pockets of these professional guys working for the feds when nothing is coming back to the fisheries... You know, when they talked about stacking the licenses, I mean, increasing the costs for licenses... the reason they did that was so that money could go back into developing resources. That never happened, so where did all that money go? (N5)

> For the forestry, that’s getting worse not better. For every dollar in stumpage that’s collected and supposed to go back in to habitat restoration activities, I’d be surprised if we’re seeing 18 to 20 cents on it right now. About a 56% ... bureaucracy overhead just to admin the contracts and supposedly monitor... (O2)

Finding the funding for even low cost programs has proven to be a challenge particularly to cover ongoing operating costs: "... we’re short funded. Never have enough funding. I mean it’s almost like the fish only swim from June to October, which isn’t right. Like who’s in there now watching the clam diggers" (N2)? Volunteer input can decrease the costs of restoration and enhancement but even volunteer projects need financial support: "the spirit of volunteerism kind of falls short when it actually involves fuelling up your boat and paying for it" (O2), particularly in a community hit hard by economic change.

Local organizations have attempted to increase the self-sufficiency of management programs in a number of ways. KTFC generates revenue from license leasing and referral services. The ‘Namgis First Nation has lobbied for many years for access to salmon surplus to spawning requirements, to be sold to generate revenue for management activities. A surplus fishery was finally approved in 1999. Royalties and landing taxes have also been suggested, although there is resistance to these concepts from boat owners in an already troubled industry. Further, users are not confident that such monies would go back into the resource rather than the federal coffers:

> I just want to see a dollar on the dollar, or 90 cents on the dollar go back into the resource, same as licensing, a sport license. That money was supposed to come 100% back into BC salmon rehab fund and it all goes to Ottawa. It goes to general revenue and our bureaucrats in Vancouver have to go back to Ottawa on their hands and knees to try to get enough money to keep their projects running (O2).

> I would love to see habitat restoration on all our creeks and streams. I would like to see...instead of the fisherman paying for his license and then it going back east to have these dummies sitting at their desk back there...I would like to see it come

> here, to our own communities...and have our own people look after what rightfully belongs to them (N6).

The underlying philosophy behind all of these efforts is that management funding should come directly from the resource. If in the long term the fishery cannot generate sufficient funds to pay for its management it is not economically viable, one respondent suggested:

> ... around 35 million dollars last year was what the salmon fishery was worth, the sort of policing and management, and DFO costs and all the rest of that are probably closer to 250 million dollars. So there's a profitability question (O2).

In the short term, however, it is recognized that a period of rebuilding is needed and that the resource has been degraded to a point where contributions for repairing past damage must come from other sources:

> The Kwakiutl First Nations recognize that, in addition to a transition period, this restoration process will create financial demands. These shall be met insofar as possible by extracting revenue from stocks that are strong and productive but will need to be supplemented through direct transfer of revenues from Non-Aboriginal governments. The latter must recognize that such transfers are not charity; they are restitution! (KTFC, 1998; 6)

Thus government funding is still required and, it is felt, justified.

5.4.9 Homogeneous Community

Another major barrier to the success of co-management in Alert Bay and the North Island region as a whole is conflict and lack of cooperation. "Homogeneous community" was identified in the literature as a success factor. Although sense of community is strong and relations among residents amicable for the most part, the community of Alert Bay is diverse, not homogenous (see Chapter Four). Results indicate that this diversity does not necessarily mean that co-management cannot be achieved, but rather that cooperative relationships, effective lines of communication and mutual respect must be established if the various segments of the community are to be able to work together, particularly in the face of conflict over resources. While several cooperative efforts are underway in the fisheries sector, including ICNRC, NIFC and the Nimpkish Resource Management Board, there remains a great deal of relationship building to do both within and between organizations:

Kingcome is one that has people resident there that almost had a hatchery but political differences seemed to dissolve that (T1).

> Every single time there was a **** meeting, everyone was represented. Now you don't have all that, you have in-house squabbling and scrapping (T4).

> I definitely think we have to really get more involved now and really start working together. Somehow, a reconciliation as the governments like to call it. Because the communities and the First Nations aren’t going anywhere (N6).

Lack of homogeneity also means that there are many interests to be represented in a co-management body. The success factor "limited number of interest groups so as not to make the process unwieldy", therefore is difficult to meet in this region. "Organizations of organizations" such as the Regional District and tribal councils tend to help consolidate these interests, however (Mitchell et al., 1999). Community and region-wide planning is also stalled by a lack of cohesion. The absence of a planning process for co-management has been discussed above, although it is worth noting that several individual organizations have their own planning processes underway, such as KTFC’s annual planning and longer term holistic workshop process.

5.4.10 Commitment

Finally, commitment from decision-makers and key actors to the co-management process is strong at the local level but a major barrier with respect to the federal government and DFO. Lack of commitment from DFO to true involvement and participation at the local level

has been discussed above. The challenge for local organizations is to build credibility both in the community and with government (through measurable results) in order to gain confidence in the ability of local organizations to assume management responsibilities. This can be achieved, in part, by creating effective organizations.

According to respondents DFO is simply resistant to change and unwilling to admit it has made mistakes in the past and that a new approach is required. "I think it's more or less to do with bureaucrats being afraid they're going to lose their job" (N2). In the absence of senior government commitment to co-management, specific policies and legislation to support co-management (e.g. community enforcement) have not been put in place. However, there is some evidence that this attitude, at least within some segments of government, is changing in response to widespread demand: "the political system has started to sway towards the community" (T1). Proposed changes to the Fisheries Act, for example, include partnering provisions that may facilitate co-management. Representatives are leery, however, that the intention of such provisions is to empower industry rather than communities.

5.4.11. Sustainable Fisheries Factors

In Chapter Three, in addition to success factors for co-management, seven factors for success in achieving sustainable fisheries management were identified. These factors illustrate the importance of influences outside of the sphere of community control. Most require a willingness to act at both the local and provincial/national level (for these factors). With respect to the ability to gather information about the impacts of management decisions, it is exceedingly difficult to understand the complexity of the social and ecological systems that are impacted by resource policy. Impacts are felt far beyond the boundaries of the study region. In large part this issue is seen to be one of willingness on the part of DFO to invest resources in assessment and research (rather than technical know-how). The same can be said for internalizing true costs. As previously discussed, methods of internalizing the costs of management in a fishery, harvesting allocations to cover management costs for example, have been identified but not implemented at the local level. Political resistance and trade agreements create barriers to implementing a user pay system even at the federal level.

Figure 26 Success factors for sustainable fisheries management

	Present?
1. Ability and willingness to internalize true costs	
2. Willingness of managers to invest adequate time and resources in planning	m
3. Willingness of resource managers to share responsibility and authority	
4. Ability to affect change in a global trade environment	m
5. Ability to resolve conflict/reach agreement among competing interests	m
6. Ability and willingness to gather and analyze adequate information about impacts of resource management decisions	m
7. Co-management arrangements involving a broad range of stakeholders	m
OVERALL	m

Symbols: l (present according to most indicators), m (present according to some indicators), no symbol indicates all indicators demonstrate factor not present.

Local organizations have contributed, however, to bringing the fishery in their region closer to compliance with these principles by pursuing co-management opportunities, undertaking assessment projects, contributing local knowledge, and seeking ways to internalize management costs in harvesting activity. Although greater effort is needed some progress has also been made in planning and resolution of conflict among competing interests.

5.4.12. Success Factors Summary

An analysis of success factors present in Alert Bay indicates that considerable capacity building and greater willingness on behalf of government to delegate greater control to the community will be required for co-management efforts to be successful and for local actions to contribute significantly to a more sustainable fishery. Key challenges include: 1) government cooperation; 2) building organizational, social, human, and ecological capacity for regional management; 3) resolving conflict/strengthening social cohesion at the local and regional level; and 4) creating mechanisms for self-funded management, particularly after resource rebuilding has taken place. A demonstrated sense of resource stewardship, commitment to an identified geographic area, a core of dedicated individuals with invaluable local knowledge, and organizational experience in fisheries projects, however, represent a foundation to build upon. Another factor that

was not identified in the literature review, entrepreneurialism, appears to be important in fisheries co-management as well as SCED. Residents have demonstrated that creative ideas can be brought to bear in solving the challenges presented by the need for more sustainable fisheries management.

5.5 Chapter Summary

The Kwakwaka'waka have a long history of involvement in resource management and stewardship. Further, there is a great deal of activity taking place today that contributes to more sustainable fisheries under the leadership of organizations such as the KTFC and 'Namgis First Nation. Well-established and new organizations share responsibilities for habitat protection and restoration, lobbying, education and communication, training and other roles. These roles continue to shift over time as relationships, needs and priorities change.

As with SCED, the community of Alert Bay appears to have a vision and philosophy that is in general alignment with those of sustainable fisheries and co-management. However, the community is at an early stage in its preparations for a significant co-management role and considerable barriers to their success exist. Cormorant Island organizations agree on the need for regional fisheries management and on many of the components of a regional fisheries management system. Yet further discussion and a cooperative planning process is needed if this vision is to become a reality. Consensus has not been reached on issues such as board mandate, structure, representation, and decision-making mechanisms.

Local capacity is a major barrier to putting such a vision into place, and even to initiating the planning process. Despite some access to program and project-related financial resources, committed leaders and citizens, ongoing relationship building, experience and a strong sense of stewardship, research results demonstrate that the community's weaknesses currently outweigh their strengths in terms of their ability to successfully implement co-management. Planning, training, organizational development, communication and cooperation must be improved. Community leaders recognize these weaknesses, acknowledging despite their desire for increased involvement and control that a co-management system, if not designed carefully, will not help to achieve sustainability in the fishery or the community. Further, issues such as selective fishing methods, an ecosystem approach to management, and efficient resource use have yet to be addressed. Resources (human and financial) are required for planning and capacity building.

Governments, particularly DFO, are also considered a major barrier to co-management efforts and to greater community control. Government reluctance to support a true co-management process has hampered the ability of community groups and local/First Nations governments to address issues such as self-reliance, full cost pricing and economic viability, adjacency and equitable sharing of costs, benefits and responsibilities. The reasons for the DFO approach to community involvement, it should be noted, were not investigated during the course of this research.

Despite the significant challenges faced, the success of co-management efforts is considered essential for the survival of the Cormorant Island community and of the fisheries resources of the region. With less than six square miles of land on Cormorant Island and only 600 acres within the reserve lands of the Namgis First Nation, the community of Alert Bay clearly depends on outlying land and marine resources for their economic well-being. Connections to the area's natural resources, however, run much deeper than jobs, income and sustenance, extending to the physical, mental and spiritual well-being of community residents and to the entire community's sense of history and identity.

The marine ecosystem surrounding Cormorant Island and the resources within it are among the community’s greatest strengths, provided they can be accessed and utilized in a sustainable manner. Efforts to date have demonstrated that community involvement in fisheries management can make valuable contributions to the sustainability of the industry, and that these contributions could be increased if the necessary capacity can be built and barriers overcome, including a commitment from senior decision makers to the regional fisheries management concept envisioned.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this research was to examine if and how a fishing-dependent community can utilize fisheries co-management as one element of an overall sustainable community economic development strategy. Out of this central research objective three sequential

research questions were posed:

1) How are the terms sustainable development, community economic development (CED) and fisheries co-management, and the relationships between these concepts, defined in the literature;

2) Linking the conceptual approaches of sustainable community economic development (SCED) and fisheries co-management to their practical application, what strategies, principles, process steps and conditions for success or failure in fisheries co-management and sustainable CED are identified in the literature; and

3) How applicable are these relationships, strategies, principles, process steps and conditions to a case study British Columbia fishing community (Alert Bay)?

The following chapter provides conclusions and recommendations in four parts: summary of literature findings (providing responses to questions 1 and 2); summary of case study findings; evaluation of the research framework, including a review of framework components and research methodology (question 3); and final conclusions regarding the utility of fisheries co-management as a SCED strategy for fishing communities.

The following conclusions and recommendations are targeted to the academic community and focus on suggestions for refining the research framework, methodology improvements and future research. Recommendations for the community have been independently reported.

1. Summary of Literature Review Findings

A review of the literature in the fields of CED, sustainable development, fisheries management and, specifically, co-management, provided a framework for analyzing CED and fisheries co-management initiatives on Cormorant Island. That framework consisted of a series of "checklists", including strategies, principles, process steps and success factors for SCED and co-management. Principles and conditions for sustainable fisheries were also outlined (see Appendix 1 for the checklists). The literature review demonstrated a great deal of overlap between the complementary concepts of sustainable development, CED, fisheries management and co-management. This overlap can be seen in the checklists. Many of the principles of sustainable fisheries, for example, are also principles of SCED. Co-management is a strategy that can contribute to the pursuit of both SCED and sustainable fisheries principles, and to the overarching objective of sustainable development. In fact, based on the literature review findings, it can be argued that co-management is essential if the goals of sustainable fisheries and SCED in fishing communities are to be achieved. Finally, success factors for co-management, SCED and sustainable fisheries are also shared. Fisheries managers and SCED practitioners, therefore, have much to gain from sharing information about their common interests. Despite the potential benefits to be derived from recognizing these linkages, the two fields are generally treated as independent of one another in the literature.

6.2 Summary of Case Study Findings

6.2.1. Sustainable Community Economic Development

The focus of the research framework employed in this study was community capacity and actions, particularly within the fishery, that can be taken at the local level to put SCED into practice - actions that follow the principles and process steps recommended for SCED. Alert Bay organizations generally espouse a philosophy that is consistent with the principles of sustainable development, and more specifically SCED and sustainable fisheries. To a certain extent their actions demonstrate a true commitment to this approach. Many principles are pursued only to a limited degree, however. These include living within ecological limits, self-reliance, economic viability, integration and long term planning, public participation, recognition of the informal economy, and entrepreneurialism. Strong compliance with the principles of stewardship, diversity, collaboration and community building, however, was exhibited. Overall, it was determined that there is a medium level of compliance with the principles of SCED on Cormorant Island. Several case study respondents argued that the SCED philosophy present in Alert Bay is rooted in the First Nations culture. Higher compliance with SCED principles among First Nations organizations may lend some support to this claim. However, further investigation is needed before conclusions of this nature can be drawn. Factors such as access to financial, human and organizational resources must also be considered.

The absence of a planning and monitoring process significantly impacted the evaluation for both individual organizations and the community as a whole. Had such a process been in place it is expected that compliance would have been high overall. Instead CED has been implemented in recent years on a project-by-project basis. Planning that has occurred has been done by individual organizations.

Efforts to devise a broader community-wide vision and strategy have not been successful to date. The case study demonstrates the importance of communication and cooperation between segments of a community (communities of interest within a community of place). Other internal factors that have influenced the success of CED efforts in Alert Bay include: inadequate funding/financial resources, low levels of education/skills, geographic isolation and poor transportation infrastructure, negative attitudes/resistance to change and a lack of available information. Leadership and community support, relationship building, the area's relatively pristine natural environment, and First Nations culture have been important positive factors in the success of CED projects on Cormorant Island and are expected to contribute to success in the future.

6.2.2. Co-management as a strategy for SCED

Case study results confirm that for central tenets of SCED such as self-reliance, economic viability, quality of life and environmental stewardship to be met the community of Alert Bay must increase its ability to sustain and be sustained by the ecosystem that surrounds Cormorant Island.

The fishery is one of three main sectors of CED activity on Cormorant Island, along with tourism and the information/education sector. While diversification efforts are underway, marine resources remain a critical source of income, employment and economic opportunity. Unique community characteristics such as isolation and the Kwakwaka'wakw culture strengthen the interdependence between people, community and the environment of which they are a part, and therefore the importance of natural resources to community well-being and of co-management as a SCED strategy. The case study illustrates, in fact, a need for a broader understanding of resource dependence than those reflected by narrow economic definitions.

> In the past, a number of political, cultural and social advances have been made, but in large measure the economic strength of Indian communities has not been substantially altered. Without greater ownership or control of the area's resources, it is doubtful if one can really consider that Indian people have any greater measure of power to determine their own destiny.

- Nimpkish Integrated Development Approach, 1975; 36

Increasing self-determination, local ownership and control of natural resources was a central objective of the 'Namgis First Nation's pioneering CED efforts of the 1970s. Much has been learned and many projects launched since this time. However, research findings demonstrate that the situation has not fundamentally changed. More than two decades later greater local control is still required.

Case study results confirm that co-management is one way to increase local control and self-reliance, particularly as longer-term processes such as treaty negotiations are underway and land and resource ownership remains in the hands of senior governments. In a post-treaty environment senior governments will be obligated to cooperate with First Nations communities. Non-First Nations neighbours will, however, also demand a say in decisions affecting their communities and the region. Co-management arrangements and other collaborative CED initiatives can help establish productive working relationships between First Nations, provincial and federal governments and communities early in the process. Other community benefits of co-management that are demonstrated by the case study include training, job creation, and community pride in efforts to create a more sustainable future. Cultural values and the informal economy are also protected.

Case study results also provide support for literature review findings that suggest that co-management can contribute to more sustainable fisheries management by restoring natural capital, speaking out on behalf of future generations, striving to make the fishery more participatory, diverse, integrated, responsive and cooperative, and linking local and scientific knowledge. Co-management (or regional fisheries management - the terminology preferred by Cormorant Island respondents), therefore, is an essential step towards SCED, resource and community sustainability.

Many of the factors for success in SCED, however, also impact the ability of Cormorant Island organizations to maximize the effectiveness of co-management efforts, and thus the benefits that are achieved. Community strengths with respect to co-management include a demonstrated sense of resource stewardship, community support for co-management efforts, leadership commitment, a long history of involvement in the fishery and fisheries management and an on going process of relationship building. An organizational infrastructure for co-management is being built over time and a vision for the future of regional management being developed, although it is in need of further discussion and clarification at the local and regional level.

However, significant barriers stand in the way of implementing co-management and other SCED strategies on Cormorant Island and in the North Island region. Further, if not designed properly, with mechanisms for accountability and monitoring for example, evidence suggests that co-management can lead to unsustainable management decisions. Key barriers include: government cooperation; cost/funding; skills; insufficient planning and public involvement (influenced by organizational capacity, resources and willingness to make planning a priority); community conflict and lack of coordination.

Many of these barriers to successful co-management are within the community's ability to overcome; others require action from agencies and governments outside of the community. Research results demonstrate that external forces play a large role in the success or failure of SCED and fisheries co-management efforts in Alert Bay. Among the most important of these factors are government policy and bureaucracy, court cases regarding Aboriginal rights and title, and changing environmental conditions. Decisions of externally controlled, multinational corporations have also impacted community well-being and to a lesser extent the success of CED efforts. Further research to examine the interface between these forces and the community is required, particularly local responses and ways that government can intervene to minimize negative impacts of external forces at the local level.

6.3 Evaluation of the Research Framework

6.3.1 Review of Framework Components

Sectors and Strategies

An initial observation from the field research was that organizations and their leaders tend to describe their CED efforts in terms of industrial sectors rather than the more functionally based strategies identified through the literature review. The 14 sectors of potential initially identified appear to adequately reflect the opportunities for development that have been identified by residents of this coastal community, with the exception of the "knowledge and education" sector, which was added as a fifteenth sector based on case study findings. Recent publications (EcoTrust, 1997) have shown that other BC fishing communities are also pursuing opportunities in this sector.

Opportunities are seen to be most promising in fisheries; shellfish aquaculture; forestry; value-added processing; tourism; arts; and housing. Of these, Cormorant Island organizations are most actively pursuing fisheries, tourism and education/research/ information management. Results demonstrate, however, that there is some disagreement among residents as well as a range of constraints and opportunities to be considered within each of these sectors. Sector-specific planning is required with in the overall SCED planning process, confirming the important of this component of the overall framework for SCED evolution and planning.

Another benefit of comparing community activities to the sector checklist has been to illustrate the large number of organizations active in tourism development on the Island and, therefore, the need for both coordination and caution to avoid over-reliance on tourism opportunities (e.g. the risk of a new single sector dependence).

Examination of the strategies employed by CED organizations also provided insight into the priorities and guiding principles of the community. Strategies of choice appear to be related to the values, desires and strengths of the community as much as an assessment of their economic potential. Of the strategies for SCED identified, all but work sharing and business recruitment were considered relevant in this setting. Training and education (human resource development), making improvements to the local environment, celebrating local identity and culture, and community involvement in resource management are the most popular strategies in Alert Bay.

Despite the perception that small business development is critical to diversification, the strategy of encouraging business development (including green business) has been pursued only to a limited extent. Similarly, although leakage is a significant problem in the Alert Bay economy, efforts to address the issue have been limited.

The importance of the informal economy is confirmed by this study, along with Ommer and Sinclair's (1996) findings that the informal economy, once tied to the formal economy (e.g. through boat ownership) becomes threatened as the formal economy experiences a downturn. Case study results confirm the need for efforts to facilitate informal economic activity. This strategy tends to be overlooked by some organizations, and therefore it is critical that this strategy be included in the framework as an alternative for consideration by

community planners.

The strategies of improving quality of life (particularly health) and strengthening sense of culture and identity have been an emphasis for some Alert Bay organizations (e.g. ‘Namgis, Whe-La-La-U, U’Mista Cultural Centre). The importance of enhancing community health and culture to CED is well illustrated by this case study.

Respondents identified lobbying senior governments (e.g. for financial resources, resource control) as an additional strategy, along with joint venturing/business partnerships. Joint venturing, which has been used to a limited extent as a way to bring external capital and expertise to the community, may also be considered a strategy for alternative financing and human resource development.

Finally, case study results highlighted two additional roles (strategies) for community organizations in fisheries management that had not been initially identified: a) distributing government funding to local projects and; b) training and/or placement of fisheries workers in employment programs. An important distinction was also made between a real policy making role for local organizations or co-management bodies and the activity of lobbying in an attempt to influence policy, the latter being the most common role played by Cormorant Island residents to date.

Principles

Most respondents agreed that adopting an explicit set of guiding principles for CED is a useful step in the development process: "There has to be guiding principles in everything you do. I think that’s understood, but it’s not written anywhere. It should be (N5)." Results generally support the importance of each of the SCED principles identified in the literature. According to interview respondents, all of the principles of SCED are important and relevant to their organizations and to the community of Alert Bay as a whole. Several respondents pointed out that First Nations culture is compatible with the CED approach, as exemplified by these principles. Results confirm that belief in the principles of SCED is an important foundation for the success and sustainability of CED strategies and initiatives, with principles such as stewardship and self-reliance overlapping considerably with the identified SCED success factors.

A challenge associated with the principles identified during the research, however, is that some of the principles for SCED, sustainable fisheries and co-management may conflict with one another. They must, therefore, be prioritized or otherwise balanced or reconciled. Alert Bay residents pointed out, for example, the conflict between the co-management principles of "central role for fish harvesters" and "appropriate and balanced/equitable representation". Respondents advocated a balanced approach to representation, with harvesters playing an important but not central role. Potential conflicts also arise between the SCED principles of entrepreneurialism and collective well-being, as evidenced by the Band run businesses emphasis of the ‘Namgis First Nation’s CED efforts in the past. Again, successful SCED depends, it would appear, on an ability to balance these two approaches. When collective efforts stifle those of the individual who is attempting to provide individual self-reliance and benefits to other residents without conflicting with other CED principles (e.g. living within ecological limits), then "the collective spirit" can be harmful. The costs of entrepreneurial activity that is not balanced with social, cultural and environmental considerations, on the other hand, are well known (e.g. ecological degradation, intrusion in social/cultural life).

Further research into these conflicts and methods of reconciliation may be useful. In the meantime communities and others who attempt to put these principles into action must make difficult trade-offs and determine themselves which principles are of greatest priority. Decisions must be made in some cases, for example, that economic viability is important but not at the cost of ecosystem integrity, entrepreneurialism but not at the expense of collective well-being, and collective thinking but not to the point where entrepreneurialism and self-reliance is discouraged.

It was also suggested by interview respondents that the principles of equity and living within ecological limits needed to be more carefully defined. Some questioned whether "equity" was the appropriate term: "Not everybody’s equal, and not everybody wants to be equal" (R2). "It's not equality, but fairness, sharing, respect for all people and things - mayaxala. We are not all equal" (KTFC workshop participant). Finally, respondents suggested that additional principles should be added, related to: enthusiasm; and culture/tradition; and morality. Case study and literature review results also suggest that the precautionary approach should be a principle of both sustainable fisheries and SCED.

In general there was support from interview respondents for the principles of representation and process found in the co-management literature, which have been pursued to some degree by local organizations.

Process Steps

Case study results confirm the importance of an effective, participatory planning process. The absence of a coordinated approach to SCED, within and across organizations, has been a barrier to the success of CED efforts. Improved planning could greatly enhance the effectiveness of strategies currently employed and may result in new strategies being pursued. For example, while human resources development is the most common CED strategy on Cormorant Island, without a linkage between training and a CED plan the question "Training for what?" has become a common one in the community, reminiscent of the situation in Newfoundland. Similarly, a plan for regional co-management is needed to assist in the pursuit of senior government cooperation and local commitment.

It does not appear that the necessary commitment to CED planning is present among Cormorant Island community leaders. In part this lack of commitment to CED planning may be due to the apparent distrust of, and skepticism about, planning as it has been practiced in the past. Typically economic development planning in the community has meant that government money is spent to bring in an outside consultant. Reports then "sit on the shelf" and are never implemented, lending support for the more participatory model suggested within the research framework. It was pointed out that planning is not enough to guarantee success: "Well...planning and, planning and getting its two different things. Getting it is the hardest part" (N2). Further, it was apparent that the type of process suggested requires significant resources (particularly human and financial), as well as a spirit of cooperation/social cohesion. These factors were determined to be lacking to some degree in the community, making planning a difficult task.

Respondents were critical of their organizations and representatives, however, for not making a more concentrated effort to devise a CED plan (including fisheries). Of the planning steps, visioning was seen to be especially important. It was noted that the absence of a common vision was a barrier to the success of SCED in the community. The importance of fully involving all local interests in the planning process through two-way communication and consensus building, and of assessing the community's readiness for change, was also demonstrated.

The community is at an early stage in the co-management process. Therefore few lessons were learned about the usefulness of the recommended process steps for co-management found in the literature review. Results demonstrated the importance of engaging in a planning process, however, to co-management as well as to SCED in general.

Conditions for Success

As with principles and process steps, many of the conditions for success for SCED and co-management within fishing communities identified during the literature review were also demonstrated to be important within the case study setting. Human, financial, social, ecological and organizational/planning capacity were areas demonstrated to be of particular importance in Alert Bay. Stronger planning and organizational capacity, it was felt, would help the community better adapt to changing circumstances. Increased social cohesion and resident well-being (health) is needed, along with improved skill and education levels. Mechanisms for raising capital to finance co-management and other CED strategies are needed. The isolation of an island location also plays an important role, representing significant challenges as well as unique opportunities and benefits. A strong sense of community and culture, along with a rich natural environment were seen to be assets for CED efforts.

One weakness of the research framework, however, was its inability to adequately account for the role of factors from outside of the community that influence the success of local development efforts. A number of important external factors were identified ranging from government policy to ocean ecosystem conditions and the support of nearby communities. While many of the external factors have been a negative influence on the community, business interest in partnering with First Nations, treaty negotiations, international demand for First Nations products and services and financial support from governments have had positive impacts. Senior governments have provided a great deal of financial support to CED efforts in Alert Bay over the years. However, over-reliance on government funding has left CED organizations in a precarious position and other kinds of follow-up support from government are needed.

Cormorant Island shares many of the characteristics of fishing communities identified in the literature: isolation; small size; lower levels of education than elsewhere in the province; attachment to fishing as a way of life; inadequate infrastructure; and a labour force whose seasonal, declining incomes have been insulated by unemployment insurance. As in Newfoundland, training in community leadership and CED, along with more effective training and education programs in general, are needed. Leadership capacity is tenuous as existing leaders feel the strain of increasing demands on their time and leadership training and recruitment takes a back seat to other initiatives and priorities.

Key differences between the characteristics of fishing communities examined in the literature and Alert Bay include a younger average

labour force age than other fishing communities and the interaction between First Nations and other non-First Nations cultures on the Island. While a younger labour force may be a positive workforce characteristic it has also meant that young people have been negatively affected by job losses in the fishery. Concerns about the health and well-being of youth in the community were prevalent among interview respondents. Interaction of First Nations and non-First Nations residents is not uncommon among BC fishing communities. However, the case study highlighted the special challenges of cross-cultural understanding, satisfying legal rights and entitlements, uncertainty and relationship building that are associated with this interaction. The importance of mechanisms for recognizing Aboriginal rights and title in co-management and CED activities quickly became evident in the research and was therefore added to the success factors included in the original framework. What may be unique in BC to Cormorant Island is the level of cooperation between the First Nations and non-First Nations segments of the community. This claim, however, requires testing through further research.

This research also suggests that willingness to cooperate/work together may be more relevant and important in this setting than "homogeneity" (considered a co-management success factor based on previous literature review). Diversity rather than homogeneity is characteristic of the BC fishery. The challenge is to reach agreement among these various interests in the industry. Also important is the recognition of the adjacency principle by federal fisheries managers (and thus resource access) who have not demonstrated a willingness to provide any special consideration to communities and fishermen located near to the fisheries resource. Further, entrepreneurialism and creativity is required not only for SCED but for fisheries co-management. Innovative ideas such as applying surplus harvest dollars toward enhancement activities and the voluntarily imposed no fishing "ribbon" are needed to address the complex and difficult challenges presented by fisheries management.

6.3.2. Research Methodology - Suggestions for Improvement

Interviews/Data Collection

Several recommendations for data collection methods can be made as a result of this research experience. One is that asking people to refer to a list of principles and offer opinions on their importance tends to result in positive responses such as "looks all good to me". Questions seeking specific evidence of action in pursuit of these principles were found to be much more effective.

A second recommendation is to simplify the language used in the interview questionnaire. Even phrases like "economic development" were not ones some respondents felt comfortable with. One respondent complained: "All these big terms. You have to go to school to decide what they should be" (T3). Further, terms used must not only be simple but also have a clear meaning (e.g. "what do we mean by pollution, let alone ecological limits" (V3)).

Third, interview locations are critical. In the interest of respondent comfort respondents were given the choice of where the interview would be held (e.g. work, home, office). Some chose noisy locations, and although an initial sound check seemed successful much of the material from these interviews was lost. A quiet location should be chosen and sound checks conducted periodically throughout the interview.

Finally, in terms of interview subjects, all respondents were chosen from the community and region. However, a substantial number of the comments, particularly surrounding barriers to SCED, pertained to senior governments. Conducting interviews of government officials would have provided them with a chance to respond and, perhaps, have resulted in a more balanced perspective. The research only represents "one half of the story" or that of the community. Additional research on government's perspective on their impact on SCED would be useful.

Analysis

In general, the methods employed for data analysis were found to be effective. However, there are several ways they could be improved. Written goals and objectives for the goals and organizations studies would have facilitated the analysis process. The absence of a formal, written strategy for the community with explicit goals and objectives for CED made it harder to evaluate efforts, particularly principle compliance. In the absence of such a strategy individual projects and activities were examined for evidence. Conflicts between principles, as discussed above, also made it more difficult to make an overall judgment about the degree to which the community is pursuing SCED. However, in this case level of compliance was clearly "to some degree".

The use of a three-point scale ranking system (yes, no, to some degree) simplified the analysis phase of the research, but resulted in broad

results. A five point scale would have painted a more accurate, and perhaps more useful, picture. In some cases compliance or success factor presence clearly lied somewhat on the left or right side of the "yes/present" to "no/not present" continuum, rather than in the middle (to some degree). Yet the ranking scale chosen did not permit reflection of this in the results tables. If a more detailed ranking system is to be employed by those who use the framework in the future, however, more precise measures and measurement techniques for the concepts embodied in the framework must be developed. For example, a survey may be used where respondents are asked to rank their performance on a scale from one to five rather than, or in addition to, the semi-structured interview format employed in this research.

Further research and investigation into a weighting system for indicators and perhaps even the checklist items themselves is required. By considering each principle of SCED equally, for example, the principle of living with ecological limits is considered to be of equal importance to economic viability. Yet proponents of the ecocentric approach to sustainable development argue that ecological principles should be paramount and thus receive greater weighting than the others. Similarly, one might argue that, within the indicators of human resource capacity, leadership is more important than management and marketing skills (or vice versa). The need for, and possibility of, creating a weighting system should be further examined.

Finally, the original intention to assign "response not available" where there was conflicting evidence was not practical. Some level of uncertainty or disagreement within the community existed on almost all issues. Thus "to some degree" responses where assigned where there was disagreement unless the majority of responses and other evidence suggested otherwise. No response was assigned, however, where evidence was absent or unclear.

6.3.3. Summary of Framework Evaluation

In the researcher's view, one of the most effective ways to assess the utility of a framework such as the one developed in the course of this research is to ask community leaders themselves. The concepts embodied in the research framework were discussed in detail with respondents through the interview process. At the end of each interview respondents were asked if the process had been useful to them. Several positive responses were provided:

> The questions are good...it’s sort of an eye opener. We have to realize what’s happening (N1).
>
> There’s a lot of things I have to go look at now, to understand, especially with economic development. It’s important for us too. You couldn’t have come at a better time for me... what I have to do is go through the minutes for economic development, and sit there and go through the last three years, educate myself, see what they’ve done (N4).
>
> Some of the issues we’ve been describing for a long time and I think it’s going to be helpful. Hopefully it’s going to have some kind of an effect on where we want to go in the future (N6).

Others pointed out that such an evaluation is only useful if something is done with it and it doesn’t "sit on the shelf" like other economic development studies that have been done: "maybe you’re lucky, but most of them, they’re filed" (V2). Some felt that there was nothing considerably new for them raised in the interview questionnaire, as these were issues they were accustomed to dealing with in their ongoing role in the community.

According to respondents, and based on the researcher’s own evaluation of the process undertaken during this study, this type of framework for evaluating progress towards sustainable development (including the subsets of SCED and sustainable fisheries) can be useful in several ways. It can be used as a tool for self-reflection. Respondent feedback suggests that this exercise may be more useful for new community leaders (e.g. Council members) than those who are more experienced and familiar with the principles and process utilized by their organizations, and the circumstances in their community. Examining the underlying principles, process steps and factors of success in development, in an explicit (even documented) and integrated way, however, helps ensure that key issues are being addressed. It can also provide a tool for building awareness among community members and leaders through their participation in the reflection and evaluation procedure.

SCED is a dynamic and continuous process. Alert Bay organizations, for example, are already working on improvements in many of the areas where weaknesses have been identified. Improvements could be seen throughout the study process, with new collaborative endeavors, training programs, and planning processes being launched. An evaluation such as this captures only a snapshot in time (1996 to 1998). As capacity building efforts continue, reviews will quickly become outdated. Such a process should be conducted on an

ongoing basis (e.g. annually/biannually) to be most effective.

Such an evaluation can also be a tool for senior governments, funding agencies, educators and others from outside the area that want to engage in or support some form of SCED activity in a community (or seek to eliminate behaviours in their own organizations that discourage SCED). The identification of areas where further development is needed raises potential concerns to look out for. In many cases the evaluation framework can be used as a tool to identify areas where capacity building is required before an initiative proceeds (or as it proceeds) rather than an indication that it should not happen at all. These concerns may indicate areas where assistance can be provided or for which information on how these concerns will be addressed should be requested. If concerns are related to the activities of their own organization, they might consider how they themselves could alleviate them (e.g. how governments can streamline the paperwork required of volunteer stewardship groups seeking to undertake restoration activities, a concern outlined by the research).

Caution is warranted, however, in using this framework as a tool for evaluating community progress and potential. If a particular organization, for example, is not addressing a critical issue or strategy this may simply mean that this issue is being addressed by another organization. In fact, several "yes" (medium to high level of activity) responses within a given strategy maybe an indication of duplication of effort. Similarly, a positive ranking (e.g. on the principle of cooperation) does not necessarily imply that further improvement is not required. Careful consideration of each particular issue and circumstance is required. Finally, difficulties in the methodology of data collection and analysis also make cautious use of this tool advisable.

Suggestions for Improvement/Further Development of the Framework

Key suggestions for framework improvement can be summarized in one word - simplification. Development and use of the framework confirmed the common ground between SCED and sustainable fisheries co-management. This common ground is illustrated by the presence of overlapping concepts throughout the framework. While this overlap is a reflection of reality it also makes the framework overly cumbersome and complex for practical use. Ways to reduce the number of items on each of the checklists must be examined. The principle of qualitative development, for example, could be encapsulated by integration, as integration of social, cultural, ecological and economic objectives implies a qualitative rather than growth oriented approach. Simplification of the framework would also decrease the number of interview questions that must be asked, in turn helping to improve response rates to each (see Section 6.3.2. above).

A second issue that arose in the application of the research framework was its applicability in First Nations communities. The framework for case study analysis was not designed with special consideration for First Nations communities. Although this was not a thesis on First Nations development specifically the predominantly Kwakwa̲ka̲'wakw makeup of the community resulted in many insights of this nature being gained and significant issues being raised that had not been covered within the general CED literature. One recommendation for further research is additional exploration of how such a framework might be modified to better suit First Nations communities. The suggestion that culture and tradition should be added as a SCED principle is one example. Further, the principle of cooperation raises unique issues in an environment where treaty negotiations are underway. Further investigation of successful cooperation between First Nations and non-First Nations governments and communities in the fields of CED and resource management is needed.

6.4 Final Conclusions

In conclusion, the study "'Na̲nwa̲k̲ola: Co-management and Sustainable Community Economic Development in a BC Fishing Village" demonstrates the integral links that exist between the concepts of fisheries co-management and sustainable CED in a coastal environment and, between resource management in general and SCED in communities reliant on natural resources for their economic, social and cultural well-being. Further, SCED and fisheries co-management play an important role in putting the theory of sustainable development, now more than a decade old, into action.

Academics and practitioners in the fields of fisheries management, co-management, CED and sustainable development must begin to recognize these links explicitly in their work. This study presents a challenge to those in these fields not only to communicate with and learn from one another, but to continue to work at refining what these concepts mean in practice, how they can best be implemented, and how researchers, governments, communities and others can facilitate the process.

Appendices

APPENDIX 1

Checklists/Code Categories

A. Key Terms (definitions)

1. Community
2. Sustainable development
3. Sustainable community
4. CED
5. Resource-dependent
6. Co-management/cooperative management
7. Partnerships
8. Community-based fisheries management

B. SCED Strategies

1. Encouraging/supporting entrepreneurship (the development of new businesses or community organizations)

2. Developing human resources

3. Work sharing

4. Plugging the leaks

5. Strengthening the informal economy

6. Recruiting businesses from outside the community

7. Increasing local ownership

8. Making improvements to the local environment

9. Physical infrastructure improvements

10. Celebrating local identity and culture

11. Quality of life improvements (e.g. social, health, recreational services)

12. Community involvement in resource management
13. Business retention
14. Environmental business management
15. Environmental entrepreneurship
16. Other?

    - political/lobbying
    - joint ventures

C. SCED Principles

1. Living within ecological limits

2. Positive, ongoing environmental change (stewardship)

3. Self-reliance and community control (self-help, self-determination)

4. Equity and social justice (satisfies needs of all community members, includes marginalized and disadvantaged groups, intergenerational equity, fair sharing of costs and benefits)

5. Broad-based public involvement in economic development planning and decision-making (bottom-up/community driven)

6. Economic viability (of individuals, businesses, organizations, ventures, processes)

7. Capacity building (builds local leadership capacity and organizational infrastructure, develops capacity of individuals to provide for their needs)

8. Long term planning and action (small strategic steps towards a long-term vision, ongoing, incremental change)

9. Diversity (biological and cultural diversity, economic diversification, diversity of perspectives/backgrounds)

10. Collaboration (within and outside the community)

11. Integration (comprehensive, holistic approach, integrating social, economic and environmental objectives)

12. Qualitative development (vs. emphasis on quantitative economic growth)

13. Recognition of the value of non-monetary contributions to community (the voluntary and informal economy)

14. Collective benefits

15. Community-building/community mutuality (looking after each other)

16. Entrepreneurialism (reward through risk, creativity)

12. Other?

D. CED Process Steps

1. Identify problem, issue or desire for proactive planning.
2. Identify a community leader and/or appropriate core leadership group.
3. Build community support, seek additional involvement. This task is based on communication and should be ongoing.
4. Create an (or if appropriate select an existing) development organization/group to spearhead initiatives.
5. Research what other communities have done.
6. Design and implement planning process (with long-term objectives and strategies, short-term action plans and appropriate methods of evaluating progress). Indicators should be community-derived, covering multiple objectives/accounts.
7. Ensure resources (human, financial, information) are in place to support the process.
8. Establish a vision.
9. Research the local economy, community health, resources. Explore opportunities. Identify local skills/talents, community strengths, weaknesses (a community profile).
10. Identify/confirm key issues and opportunities.
11. Assess local capacity and readiness for change.
12. Set long term goals and objectives.
13. Determine how success will be measured.
14. Create a strategy with targets, goals and timetables. Select project ideas, conduct viability analyses and create project action plans.
15. Awaken local resourcefulness. Create local partnerships.
16. Raise funds locally.
17. Generate additional capital as required. In some cases this will mean seeking support from senior governments.
18. Implement project action plans.
19. Develop human resources (training, leadership)
20. Evaluate progress regularly and, if necessary, adapt strategy.
21. Build on successes.

22. Other?

E. Sustainable Fisheries Principles

1. Restoration and maintenance of natural capital
2. Ecosystem approach

3. Rights of adjacency and historic dependence

4. Intergenerational equity

5. Precautionary and anticipatory approach (recognizes complexity)

6. Integrated

7. Full cost pricing (includes environmental and social costs)

8. Efficient resource use (maximum value obtained, avoids waste)

9. Diversity (cultural, biological, economic)

10. Economic viability

11. Participatory

12. Responsive, adaptive and effective planning and management*

13. Cooperative (i.e. between stakeholders, harvesters, government, scientists)

14. Linking scientific and local/traditional ecological/fish harvester knowledge

15. Equity and fairness in sharing of costs, benefits and responsibilities

F. Co-Management/Process Principles

Integrity of Representation

1. Broad-based/inclusive
2. Appropriate and equitable representation
3. Voluntary participation
4. Accountability
5. Central role for fish harvesters
6. Community involvement and local stewardship
7. Up-front involvement

Integrity of Process

8. Capacity building and education
9. Respect for other participants
10. Sharing and delegation of authority
11. Shared rights/roles and shared responsibilities, fairness, balance between benefits and costs
12. Open and transparent process
13. Purpose driven
14. Consensus-based
15. Self-design
16. Trust and sincerity
17. Quality information
18. Integration of local ecological knowledge and "mainstream science"
19. Realism, affordability
20. Process flexibility/monitoring and follow-up (feedback loops)

21. Other ??

G. Co-Management Activities/Strategies

1. Stock assessment

2. Habitat assessment and monitoring

3. Habitat protection, restoration and enhancement

4. Stock enhancement (e.g. hatchery management)

5. Enforcement of harvesting

6. Setting harvest targets

7. Deciding on time and area of openings

8. Allocation/licensing

9. Product marketing

10. Policy making

11. Education/communication

12. Other?

H. Co-management Process Steps

See Appendix 5.

I. Co-management Success Factors

1. Management area geographically defined (with some clarity and consensus)
2. Traditional role of community in stewardship
3. Traditional authority is strong
4. Existence of avenues for legitimate representation (e.g. organizational infrastructure)
5. Homogeneous community
6. Limited number of interest groups so as not to make the process unwieldy
7. Commitment from decision-makers and key actors including follow up/implementation support
8. Specific policies and/or legislation
9. People buy-in, feel they are benefiting more than paying
10. Affordability/cost (time and money)
11. Balanced representation

12. Educated and supportive non-active public

13. Leadership

14. Knowledgeable participants (education and training)

15. Process design (e.g. accommodating participants' needs to ensure participation)

16. Volunteer and human resources
17. Other?

- Mechanisms for recognizing Aboriginal title

- Resource access (adjacency)

J. CED Success Factors

Human Resources and Human Resource Development

1. Clear and appropriate leadership

2. Availability of education, training programs and learning opportunities (includes adult education, conventional educational institutions, informal learning options)

3. Presence of a skilled (specialized yet flexible) labour force, young and educated/trained individuals who participate in the labour force

4. Management, marketing, technical/professional skills

5. Entrepreneurial spirit

6. Active citizens/volunteers

7. Willingness to change

Economic and Enterprise Capacity

8. Business success rates/economic health of local businesses

9. Diversity (reliance on one or few employers, sectors vs. variety of employers by size and type)

10. Local ownership

11. Local supply and demand networks (existing enterprises and opportunities for development)

12. Existence of outside trade networks/access to outside markets

13. Base of informal (non-cash) economic activity

14. Identified economic diversification opportunities

Financial Capacity

15. Availability of, and evidence of an ability to obtain, grant funding from external sources (eg. government, foundations or private donors).

16. Availability of, and ability to access, outside capital and credit (loans and investment). Investor confidence (where lacking, community seeks to rebuild).

17. Locally generated and operated funding, financing and granting mechanisms (eg. local credit unions, community loan funds or foundations, local investors). Ability to generate local capital also related to taxes and income generated in the community. Community is willing and able to invest its own money in the process or initiative.

Social/Quality of Life Factors

18. Sense of community identity, culture, history

19. Social and cultural amenities

20. Health and well-being (current levels and related services)

21. Social cohesion/collective spirit

Organizational Capacity

22. Range of community-based organizations and institutions

23. Health/effectiveness of community-based organizations and institutions

24. Broad-based community participation

25. Willingness and ability to sustain development efforts over the long-term (e.g. 10 to 30 years).

26. Willingness and ability to collaborate (within the community and outside of the community).

27. Experience with, and willingness to utilize, a strategic planning and evaluation process in CED efforts

Ecological Factors

28. Environmental health

29. Protected areas

30. Productive natural resources

31. Unique natural features of the community and surrounding region

32. Community concern for (and steps taken towards) ecological sustainability.

Community Resources - Other

33. Appropriate and reliable information (includes access to communications and information technology)

34. Physical infrastructure (underutilized buildings, sewage, water etc.)

35. Transportation infrastructure/distance to major markets and transportation routes

36. Ability to adapt (at individual, enterprise, organization and community level).

37. Senior governments are willing and flexible enough to follow the community's lead, to provide advice, cost-share development initiatives and develop policies that will support local efforts.

38. Other?

K. Other Topics/Recurring Themes

1. Treaty/land claim settlement
2. Youth
3. Make work projects
4. Policy impacts

L. Sectors

1. Fisheries
2. Aquaculture
3. Forestry
4. Value-added manufacturing
5. Tourism
6. Agriculture
7. Retail
8. Services
9. Professional services
10. High technology industries
11. Arts and crafts
12. Housing
13. Health
14. Nutrition
15. Other?

— education/research/information management

Appendix 2

Criteria for Evaluating the Application of SCED Principles

How can I tell if the principles of sustainable CED are being pursued? Fisheries specific questions, addressing sustainable fisheries principles, are included.

Guiding Questions

Do community members feel that the principles listed below are important or appropriate as a foundation for development in their community?

1) Living within ecological limits

- Has the question: "Are wastes being disposed of at a rate greater than the physical environment's ability to assimilate them?" been raised within the CED planning process?
- Also, "Are resources being extracted at a rate greater than the resource and its supporting systems are replenished?"
- "Are harvest rates resulting in loss of species or genetic diversity?"
- Has there been an attempt to gather information on the status of ecosystem health and what the physical limits to the ecosystem are?
- Has the community identified its limits to growth? areas that should be protected from development due to their environmental importance?

Fisheries:

- Are harvest rates resulting in declining returns?
- Are harvest rates resulting in loss of species or genetic diversity?
- Has there been an attempt to gather information on the status of local fish stocks and the impacts of harvesting and other human activities on aquatic ecosystems?

2) Positive, ongoing environmental change

- Is the community striving for:
    - more efficient use of resources and improved conservation measures?
    - pollution prevention and the elimination of toxic materials?
    - replacement of non-renewable with renewable resources?
    - waste minimization?
    - maximum reuse and recycling?
    - biodiversity preservation?
    - use of environmentally benign technologies and durable, repairable products?
    - restoration and/or enhancement of natural habitats affected by past use?
- Is this reflected in the CED strategy?

Fisheries:

Is the community striving for:

- value added (e.g. public fish sales, sales in local restaurants, small scale processing)?
- reduction in bycatch?
- development of selective fisheries or alternative methods of reducing harvests of vulnerable stocks?
- reduced energy consumption and pollution related to the fishery?
- restoration of fisheries habitats and enhancement of weak stocks?

3) Self-reliance and community control (self-help, self-determination)

- Has the community identified its own strengths and resources?
- Has the community identified its dependencies on outside economic interests?

- Have steps been taken to overcome or reduce those dependencies?
- Have imports been identified? Are they necessary? Have the social and environmental implications of imports been considered (e.g. Is there any consideration for "fair trade")?
- Does the CED strategy seek to strengthen the autonomy of individuals, encouraging and empowering citizens to utilize their skills, resources and creativity and pursue their desired role in the community economy?
- Does the CED strategy seek to increase local food and energy production?
- Does the CED strategy encourage local ownership and investment?

Fisheries:

- Has the community identified its own strengths and resources with respect to the fishery?
- Has the community identified its dependencies on outside economic interests with respect to the fishery and taken steps to overcome or reduce those dependencies?
- Does the CED strategy seek to increase community involvement in fisheries management?

4) Equity and social justice

- Is provision of affordable housing a need in the community? If so is it a component of the CED strategy?
- Is provision of adequate nutrition for all community members a need in the community? If so is it a component of the CED strategy?
- Does the CED/fisheries strategy take into account land claims resolution and Aboriginal rights?
- Are the costs and benefits of development fairly distributed (including consideration of historic dependence and adjacency in fisheries)?
- Are the implications of development decisions for future generations being taken into account?

5) Broad-based public involvement

- Is the CED planning process and open one? Are meetings open to all citizens? Are meeting minutes available and easily accessible?
- What other avenues have been provided for public input? Are there avenues for the participation of citizens who do not feel comfortable speaking out at public meetings?
- Are steps being taken to provide the public with information throughout the CED process and to encourage their active involvement? Do citizens know what is planned?

- Have First Nations perspectives been taken into account? youth? low income and unemployed residents? women? all those who stand to benefit or lose?
- Do these groups feel they have adequate opportunities for representation/input in the planning process?
- Do citizens feel there is an outlet for them to express their ideas or concerns - to give input?
- Do they feel confident that their input will be listened to and fairly considered?
- Is input received acted upon?

- Do citizens feel that decisions related to CED made by elected municipal officials will reflect the will of the majority of the Village's citizens?

6) Economic viability

- Are CED and fisheries initiatives economically feasible? Self-supporting?
- Can they financially support mechanisms of monitoring and ensuring social and environmental responsibility (e.g. a fisheries management system)?
- Are initiatives working to ensure maximum value is received from resources?
- Is there a mechanism for supporting the planning process itself financially?

7) Capacity building

- Are citizens given the opportunity to gain the information/knowledge/skills required to participate effectively in CED planning

and fisheries co-management activities?
- Do citizens who have a business idea have somewhere to turn to for support (e.g. advice, mentoring, training)?
- Are leaders (and potential leaders) provided with opportunities for, and/or encouraged to undertake, leadership training (e.g group facilitation, organizational, financial and project management, negotiation and partnership building)?

8) Long term planning and action (small steps, incremental change)

- Is the CED strategy based upon a vision of the community ten years or more in the future?

- Is there a five year plan? one year? short-term action plan building toward longer term goals?
- Is periodic evaluation incorporated into planning process design?
- Is there a plan for fisheries management activities (same timelines as above)?

9) Diversity

- Is there a respect and appreciation for the diversity of the community reflected in the planning process and resulting strategies/activities? (See above questions re. diversity of participants in planning and decision-making process.)
- Does the CED strategy include a diversity of industrial sectors and types of employment opportunities?
- Do organizations active in fisheries management take a multi-species, ecosystem approach?

10) Collaboration (within and outside the community)

- Are partnerships within a community and with outside agents such as government and educational institutions a part of CED initiatives and strategies? With other communities?

11) Integration (comprehensive, holistic approach)

- Does the CED/fisheries strategy take into account social, cultural, ecological and economic dimensions?
- Have measures of success been defined? If so, do they include environment and social/cultural as well as economic considerations?
- Are these (or similar, multiple objective) indicators also used in the evaluation of development and management options?

12) Qualitative development (vs. emphasis on quantitative economic growth)

- Does the strategy emphasize not just material wealth, but the spreading of material prosperity to those in need and the development of emotional, spiritual and natural wealth within the community?
- Is economic development viewed as a means to this end or an end in itself?
- Are job creation initiatives concerned about creating meaningful and satisfying work opportunities?

13) Recognition of the value of non-monetary contributions to community

- Does the CED strategy encourage and take into account the significance of unpaid personal, voluntary and household activity?
- Does the CED strategy support the development of social as well as business entrepreneurship (e.g. the creation of new community initiatives and NGOs)?
- Do fisheries co-management efforts protect and/or facilitate sustenance or "food" fisheries or other informal economic activities?

14) Collective benefits

- Are the goals and objectives of strategies and initiatives related to the well being of the community as a whole (rather than benefiting only certain individuals or segments)?

15) Community-building, community mutuality (looking after one another)

- Has Alert Bay's character/identity been defined (by its residents)?
- Does the development vision/strategy relate to this identity/sense of place?
- Does the strategy address the requirements of those in need?
- Does the strategy encourage residents to support one another?

16) Entrepreneurialism (reward through risk, creativity)

- Are programs in place to provide financial, technical or other support to local entrepreneurs?
- Are creative local solutions encouraged/recognized?

Appendix 3

Interview Schedule

Introduction

In accordance with accepted ethical research practices Simon Fraser University requires me to inform you of the following conditions pertaining to your participation in this study before we begin.

1. The nature of the questions you will be asked relate to answer your experience as a community member and/or representative of an organization or government active in the fields of community economic development or fisheries management on Cormorant Island. Please indicate in each case if your response reflects the position of the organization you represent, your own personal point of view or both.

2. Participation in the interview is voluntary. You are free to stop participating in the following interview at any time or to refuse to answer any of the interview questions.

3. All the information that you provide in the interview will be treated as confidential. Your name will never appear together with the interview materials or elsewhere as a result of this study. Only yourself and the interviewer, will be aware of your responses to the following questions. Confidentiality and anonymity will be guaranteed.

4. I will be recording the interview, with your permission, using both a tape recorder and written notes. Are you comfortable with the use of an audio recorder?

5. It is expected that the results of this research will be published. The thesis report on this research, when it has been published, will be available to residents of Alert Bay, members of the ‘Namgis First Nation, Whe-La-La-U Area Council and other organizations involved in this study. Journal articles and a written monograph may also be published.

6. Prior to thesis completion or other publication of research results you will be given the opportunity to review and comment on the findings. In the case of findings related to First Nations governments or organizations results will not be published without explicit consent as stated in the ‘Namgis First Nation Guidelines for Visiting Researchers.

4. If you have any questions about the research, the interview procedure, or the use of information gathered from the interview, please feel free to contact myself, Kelly Vodden, at (604) 291-3117. If you have any concerns about how the interview was conducted or the use of the material from the interview, you may also contact either my academic supervisor Dr. Bob Brown, Department of Geography (604) 291-3714 or the Chair of the Department, Dr. Alison Gill at 291-3718.

Do you have any questions about the research or the interview at this time? Do you understand fully the conditions outlined above? Do you agree to proceed with the interview under these agreed upon conditions?

Interview Schedule Section #1: Defining/Describing Community 1.1 Do you feel you belong to a community? 1.2 How do you define this community? 1.3 What makes your community special or different?

1.4 Do you have anything else you would like to say about your community at this time?

Section #2: Identification with Other Key Terms

2.1a Have you heard the term sustainable development before?

2.1b If yes, how would you define it?

2.2 Do you think it important for your community to try to practice sustainable development?

2.3a How about sustainable community? Have you heard this term before?

2.3b If yes, how would you describe a sustainable community?

2.4 What would it mean to you for your community to be sustainable?

2.5 Is your community sustainable now?

2.6 Do you think your grandchildren's children will be able to live and work in Alert Bay?

2.7a Will they enjoy the same kind of life that you do?

2.7b If not, do you expect it will be better or worse?

2.8 If it is your opinion that your community is not sustainable, could it become sustainable?

2.9 If so, do you have any ideas about how this might happen?

10. What does the term ""community economic development" mean to you?
11. In your opinion, what matters most about community economic development?

2.11b What are the most important objectives of community economic development?

2.12 How would you describe a resource-dependent community?

2.13a Would you say that Alert Bay relies on fisheries?

2.13b Tourism?

2.13c Forestry?

2.13d Government services?

2.13e Government transfer payments?

Section #3: Opportunities for Community Economic Development (CED)

3.1 Has your organization brainstormed about possible economic development opportunities in your community?

3.2 If so, in what areas were opportunities identified?

3.3 In what areas do you think there are opportunities:

3.3a fisheries?

3.3b aquaculture?

3.3c forestry?

3.3d value-added manufacturing?

3.3e tourism?

3.3f agriculture?

3.3g retail?

3.3h services?

3.3i professional services?

3.3j high tech industries?

3.3k arts and crafts?

3.3l housing?

3.3m health?

3.3n nutrition?

3.3o other?

4. Which of these opportunities is your organization actively pursuing?
5. Which of these opportunities does your organization plan to pursue in the future?

Section #4: CED Strategies

Please indicate if your organization has pursued the following CED strategies (yes, no, to some degree, don’t know/uncertain).

4.1a Starting and/or helping with the development of new business or new community organizations?

4.1b If no, any reason strategy has not been used?

4.1c If yes, give example.

4.2a Developing human resources?

4.2b If no, any reason strategy has not been used?

4.2c If yes, give example.

4.3a Work-sharing?

4.3b If no, any reason strategy has not been used?

4.3c If yes, give example.

4.4a Plugging the leaks?

4.4b If no, any reason strategy has not been used?

4.4c If yes, give example.

4.5a Strengthening the informal economy?

4.5b If no, any reason strategy has not been used?

4.5c If yes, give example.

4.6a Recruiting new businesses from outside of the community?

4.6b If no, any reason strategy has not been used?

4.6c If yes, give example.

4.7a Increasing local ownership?

4.7b If no, any reason strategy has not been used?

4.7c If yes, give example.

4.8a Making improvements to the local environment?

4.8b If no, any reason strategy has not been used?

4.8c If yes, give example.

4.9a Physical infrastructure development?

4.9b If no, any reason strategy has not been used?

4.9c If yes, give example.

4.10a Celebrating local identity and culture?

4.10b If no, any reason strategy has not been used?

4.10c If yes, give example.

4.11a Quality of life improvements?

4.11b If no, any reason strategy has not been used?

4.11c If yes, give example.

4.12a Community involvement in resource management?

4.12b If no, any reason strategy has not been used?

4.12c If yes, give example.

4.13a Business retention?

4.13b If no, any reason strategy has not been used?

4.13c If yes, give example.

4.14 Are there other community economic development strategies you have pursued or wish to pursue?

Section #5: Community Involvement in Fisheries Management

5.1 Do you think that your organization should play a greater role in fisheries management?

5.2 In which of the following areas do you think your organization should play a greater role:

5.2a stock assessment?

5.2b habitat protection, restoration and enhancement?

5.2c stock enhancement?

5.2d enforcement of harvesting?

5.2e deciding on time and area of openings?

5.2f policy making?

5.2g habitat assessment and monitoring?

5.2h setting harvest targets?

5.2i product marketing?

5.2j other?

5.3 Do you think that the community in general should play a greater role in fisheries management?

5.4 If yes, what kind of community involvement should also take place not discussed above?

5.5 What are the benefits of community involvement in fisheries management?

5.6 What are the disadvantages?

5.7 What do you think: community management of fisheries is "like letting a fox in the chicken coop"

8. If you had the level of community involvement that you would like, what would be role of:

5.8a the federal government?

5.8b the provincial government?

5.8c individual fishermen?

5.8d local governments?

5.8e interested community organizations?

5.8f conservation groups?

5.8g processing companies?

be in fisheries management.

5.9 How would all of these stakeholders work together?

5.10 Do any of the following terms reflect your vision of fisheries management:

5.10a co-management?

5.10b cooperative management?

5.10c partnerships?

5.10d community-based fisheries?

5.11 Is your organization already active in some aspects of fisheries management?

5.12 Which ones? Describe what your organization has done in each of the areas.

5.13 Does your CED strategy include a plan to increase community involvement?

5.14 In your opinion, how important is local involvement in fisheries to sustainable CED?

Section #6: Fisheries Sustainability

6.1 Do you think harvest rates are resulting in declining returns?

6.2 Are harvest rates resulting in loss of species or genetic diversity?

6.3 Has org gathered info on status of local fish stocks, impacts of harvesting, other human activities?

6.4 Has org identified your community's strengths and resources within the fishing industry?

6.5 What are they?

6.6 Have you identified weaknesses or challenges?

6.7 What are they?

6.8 Have the community's dependencies on outside interests in the fishery been identified by your organization?

6.9 Has anything been done to try and reduce those dependencies?

6.10 Please indicate yes, no, to some degree, don’t know/uncertain. Is your organization

striving for:

6.10a value added?

6.10b reduction in bycatch?

6.10c development of selective fisheries or other methods of reducing catches of

weak stocks?

6.10d reduced energy consumption and pollution related to the fishery?

6.10e restoration of fisheries habitats and enhancement of weak stocks?

Section #7: Principles

Please state whether the following principles are considered very important, somewhat important, not important or you don't know within your organization/community?

7.1 Living within ecological limits

7.2 Positive, ongoing environmental change

7.3 Self-reliance and community control

7.4 Equity and social justice

5. Broad-based public involvement in economic development planning and

decision-making

7.6 Economic viability

7.7 Capacity building

7.8 Long term planning and action

7.9 Diversity

7.10 Collaboration

7.11 Integration

7.12 Qualitative development

7.13 Recognition of the value of non-monetary contributions to community;

7.14 Collective benefits

7.15 Community-building/community mutuality

7.16 Entrepreneurialism

7.17 Are there other important principles that are missing in this list?

7.18a Which are the three most important principles?

7.18b Which are the three least important principles?

7.19 Which of these principles would you say that your organization is practicing?

7.20a Are there principles you or your organization would like to pursue but

haven't been able to?

7.20b If yes, why?

21. Do you think there needs to be a set of principles or values such as these

underlying CED efforts?

Equity and Fairness 7.22a To the best of your knowledge is there adequate housing for people of low

income?

7.22b If no, is this part of community's CED strategy?

7.22c If your community does not have a CED strategy, has it been part of past strategies?

7.22d Do you think this will or should be part of your new strategy once

developed?

7.23a To the best of your knowledge are members of the community receiving

good nutrition?

7.23b If no, is this/will be part of community's CED strategy?

7.24a Would you say that income is fairly distributed in your community?

7.24b In no, has this been addressed in your CED efforts?

25. Would you say that the settlement of land claims in BC is an issue related to fairness and equity?

7.26a How closely have you followed the local claim?

7.26b Have you been directly involved in treaty negotiations?

7.27a Do you think land claims negotiation and CED are related?

7.27b If yes, how?

7.28a Are your organization's efforts around treaty; settlement linked to your community economic activities?

7.28b If yes, how?

Informal Economic Activity

7.29a Are any of your friends of family over the age of 18 living with you?

7.29b Would you say that this is common in your community?

7.30 Do you harvest local food products?

7.31 If yes, what?

7.31a fish?

7.31b shellfish?

7.31c berries?

7.31d seaweed?

7.31e garden produce?

7.31f other?

7.32 Would you say that this is common in your community?

7.33a Do you provide food to your friends and family?

7.33b Would you say that this is common in your community?

7.34a Do you provide child or elder care for friends and family?

7.34b Would you say that this is common in your community?

7.35 What other ways do people help each other in your community?

7.36 Have you seen any change in how, or how much, people help each other?

Self-reliance 7.37 What kinds of things do people, including yourself, buy outside of Alert Bay?7.38 Do you think that any of these things could be made locally? 7.39 Thought how products bought outside of community might effect people and place

where made?

7.40 Do many people in Alert Bay invest their money locally?

7.41a Do you?

7.41b If yes, how?

7.42a Would you invest in a community loan fund if it meant receiving a slightly lower

interest rate?

7.42b Do you think others in the community would?

7.43 Has your community looked at ways to increase local investment?

44. Has your org identified your community's dependencies on outside economic

interests?

45. Has there been steps taken to overcome or reduce reliance on these outside interests?
46. Has your organization considered the possibility of producing energy locally?

Living within Ecological Limits 7.47 Has the question of waste production been raised in your organization’s planning?7.48a Have steps been taken to minimize waste production in your community?

7.48b If yes, could you tell me about these steps?

7.49 How about pollution?

7.50 Energy use?

7.51a Are harvest rates sustainable?

7.51b Has this been considered in your natural resource-based economic development

efforts?

7.51c If yes, could you give an example? 7.52 Do you know of any species being lost in your area? 7.53 If yes, in your opinion why are they being lost? 7.54 Has your org done, or planning to do, anything about it?

7.55 Has there been an attempt to gather info on the health of the ecosystem in your area?

7.56 Has the community identified limits to its own growth? 7.57 Have areas that should be protected from development due to environmental

importance been identified?

Broad-based Public Involvement 7.58 Is your organization's CED planning process an open one? 7.59 Are meeting minutes available to citizens and easy for them to get? 7.60 Are there other avenues for public input that have been provided?

7.61 Are there ways for people who do not feel comfortable speaking out in public to participate?

7.62 Are community members provided with info in planning processes and encouraged to get involved?

7.63a Do community members want to be involved in planning?

7.63b Have people participated when given the opportunity?

7.64 Have the following segments of the community been involved:

7.64a First Nations and non-First Nations residents?

7.64b low income and unemployed residents?

7.64c women?

7.64d youth?

65. Do you think groups feel have adequate opportunity for representation or input in

planning for CED?

7.66 Do people generally feel there is an outlet available for them to express their ideas or concerns?

7.67a Do they feel confident that their input will be listened to and fairly considered?

7.67b If no, why not?

68. Do you think people feel CED decisions by elected officials reflect will of majority

of citizens?

7.69 What is the election turnout rate?

7.70 How often do your elections take place?

Economic Viability

7.71a Do you have difficulty financing your CED projects?

7.71b CED initiatives are economically feasible?

7.72 Are they generally self-supporting?

7.73 How do you finance the process of planning for CED?

Capacity Building 7.74 Are citizens given opportunity to gain info/knowledge/skills required to participate

in CED planning?

7.75 Do citizens who have a business idea have somewhere to turn to for support

7.76 Are leaders provided with opportunities to undertake leadership training?

Long Term Planning and Action 7.77 Are CED strategies and initiatives based upon a vision of community 10

years or more in future? 7.78a Is there a five year plan? 7.78b One year? 7.78c Short-term action plan building toward longer term goals?

Diversity 7.79 Would you say your org respects the diversity of individuals and groups within your

community? 7.80a Does your organization's CED strategy/CED efforts include a variety of industrial

sectors?

7.80b Variety of business types? 7.81 Have you tried to provide a variety of kinds of employment opportunities?

Collaboration 7.82 Are partnerships within the community a part of CED initiatives and strategies?7.83 How about partnerships with outside agencies such as governments and educational

institutions?

7.84a How about other communities?

7.84b Have any CED projects or planning processes involved working with neighbouring

communities?

Integration 7.85 Does your CED strategy take into account social, cultural, ecological and economic

objectives and implications?

Section #8: Process Steps

1. Are one or more groups or formal organizations in community taking a leadership

role in fisheries management and/or CED in the community?

8.2 Do you consider your organization/government to be one of those leaders?

8.3 Does your org have vision statement describing what you would like your community to be in future?

8.4 Is CED part of this vision?

8.5 Are you aware of the vision statement adopted by Village of Alert Bay in June 1996?

8.6 Were you part of that visioning process?

8.7a Is this similar to your organization's vision for the future of your community?

8.7b Your personal vision?

8. Are you aware of the draft vision devised by KTFC at their Nov., 97 Holistic management conference?

8.9 Were you part of that visioning process?

8.10a Is this similar to your organization's vision?

8.10b Your personal vision?

8.11 Are you aware of any other local vision statements?

12. Do you think there will be an attempt in the future to find a shared vision among the various governments and organizations involved in CED and fisheries on Cormorant Island?

8.13 Has your organization researched what other communities have done in the area of CED or fisheries management?

8.14 Designed or implemented local planning process for long and short-term plans for CED or fisheries management?

8.15 Do your vision and strategies for CED relate to what is unique or special about your community?

8.16 Have you established methods of evaluating your progress in CED?

8.17 Fisheries management?

8.18 Have you established measures of "success"?

19. If yes, what are they? Do they include environment and social/cultural as well as economic considerations?

8.20 How often do you evaluate the success of fisheries or other CED projects, programs or strategies?

8.21 Have you assessed your community's strengths, its assets that can be used in CED?

8.22 What about weaknesses?

8.23 Have you considered the community's readiness for change?

8.24 What timeframe does your CED strategy cover?

8.25 Does it include targets or goals?

8.26a Does the strategy include sectors or types of target enterprises?

8.26b Preferred strategic options?

8.26c A plan for the type of org and individuals that will manage the process?

8.27 Does the CED strategy include fisheries?

8.28 Does your org have a separate strategy for its fisheries-related activities?

8.29 Are such strategies documented?

8.30 Are they available to residents/band members if they request them?

31. In the past you have selected specific CED/fisheries projects to undertake. How

were they chosen?

8.32 Are projects compared to previously established objectives or measures of CED success when decisions are made about whether a project should be approved?

8.33 Have you created project action plans that include measurable objectives?

8.34 Do these project action plans also include the project inputs?

8.35 Have you created local partnerships to help support the project?

8.36 Raised funds locally to start the project?

37. Did you then look to senior governments to provide advice or to share project

costs?

8.38 Have training or leadership development programs been offered as part of the project?

38. Have you evaluated the project's progress on a regular basis?

8.40 In your opinion, is this type of planning process appropriate for your community? **Section 9: Perception of Strategy/Initiative Success, Barriers and Conditions for Success**

9.1a Are there CED or fisheries initiatives that your organization has undertaken that you would say have been a success?

9.1b If yes, what ones?

9.1c What made them successful?

9.2 Has your org been able to build on its successes?

9.3a Would you say that this has created a positive attitude?

9.3b Entrepreneurial spirit?

9.3c Community and investor confidence?

9.4a Are there CED or fisheries initiatives that your organization has undertaken that

you would say have not been a success?

9.4b If yes, what ones?

9.4c What went wrong?

9.5 Are there other important factors not already mentioned?

9.6 What are the three biggest barriers to implementing CED projects and fisheries initiatives?

9.7 What are the three most important factors contributing to success?

Specific Success Factors 9.8 Do you think there is a strong sense of community in Alert Bay? 9.9 Are there community leaders who are dynamic, skilled, knowledgeable,

and have the support of community? 9.10 Would you say there is a feeling of crisis in the community?

9.11 If yes, has the crisis caused community members to feel that there is a need for change?

9.12 Has this motivated leaders and citizens to act?

13. Is there a realization the community and individuals will have to initiate, take responsibility for change?

9.14 If no, is there an expectation that agencies or organizations from outside the community will fulfill that role?

9.15 Has the community banded together to work toward change?

9.16 If no, are they capable of doing so?

9.17 Is there general agreement in community on the direction that the community should be headed?

18. Is there evidence from the past that your community can adapt to economic change?
19. What role have senior governments played in your CED initiatives?

9.20 Have they been a positive or negative factor?

Financial Resource Capacity 9.21 With respect to access to capital, have senior governments invested in CED in your

community? 9.22 If no, have they expressed a willingness to do so? 9.23 How about local government?

9.24 How about outside business interests?

9.25 How does your org normally finance business and CED initiatives?

Section 10: Socio-Demographic Attributes of Respondents

10.1 Are you male/female?

10.2 Which age category do you belong to (options given)?

10.3 Are you of First Nations ancestry?

10.4 Is English your first language learned?

10.5 Are you more comfortable with a language other than English?

10.6 How long have you lived in Alert Bay?

10.7 Are you currently employed?

10.8 What is your occupation?

10.9 What is your level of education (options given)?

Section 11: Feedback 11.1 How did you feel about this interview? 11.2 Was it too long? 11.3 Did you find the questions were clear or confusing?

11.4 Do you have any suggestions for how the interview might have been improved?

11.5 Do you feel the questions reached issues that are of concern to your community?

11.6a Do you feel you learned anything from this interview?

11.6b "If yes, what?"

Relevant questions were also asked that were unique to the organization of which the respondent was a part, based on previous information obtained either through observation or background documentation. For example, "Can you tell me a bit about the oyster project? What are the project objectives? How long has it been around? How was it initiated? Have you evaluated its success? Is it related to a broader resource management, economic or community development strategy? What barriers/challenges have you come across?" Finally, probes may be utilized to encourage a respondent to expand on their responses or comments. For respondents that did not represent a particular organizations questions were made generic to their community.

APPENDIX 4

PROFILE OF RESPONDENTS

Respondents included: 9 ‘Namgis representatives (2 of whom are also representatives of the KTFC); 5 Village representatives; 5 representatives of other First Nations organizations, including the Tribal Council and other organizations serving multiple First Nations; 12 other residents (including 5 from Tourism Alert Bay); and 5 regional representatives. In total 36 people participated in interview sessions.

More informal interviews were also conducted with representatives of North Island Secondary School and the Native Brotherhood/UFAWU Centre for Displaced Fisheries Workers. These were recorded on paper only and questions were specific to their organizations (e.g. different from the Interview Schedule provided in Appendix 2). Therefore these 2 interviews were not included in summary interview results but instead were used as supplementary data.

Respondents came from a range of backgrounds in terms of education level, occupation and employment status, age, length of residence, First Nations ancestry, and gender. Of 33 respondents who provided information about their ancestry 17 (52%) were of First Nations descent. The majority of respondents (57%) were also long-time residents, with 13 out of 23 who provided responses regarding length of residence (out-of-town residents excluded) indicating that they had lived in the community for more than 20 years. Six had lived in Alert Bay ten years or less. Males made up 69% (25 individuals) of the respondents. Of the 14 elected officials interviewed only one was female.

Apparently reflective of the management and leadership of Cormorant Island governments and organizations, 23 of 25 respondents (92%) who provided information about their age fell between the ages of 35 and 64. Only one respondent was over 65 and one less than 35. Most respondents (82%, 18 individuals) had some form of post-secondary education or training. Nearly one-third, however, (32%, seven individuals) had not completed high school, while the same number had completed university degrees.

Of 31 respondents to the question of employment status, 22 (71%) were employed, three unemployed, five enrolled in a training program, and one was a fisherman who replied "yes and no" due to the uncertainty in the industry. Of those who reported their occupations, ten were employees of local governments and community organizations, five were fishermen, five were business people, five were involved in a tourism project, three were self-employed artists (two former fishermen), one was a self-employed fisheries biologist, one a net loft/restaurant manager and one a government (Ministry of Forests) employee. Nearly all held some form of community leadership role and were active in community development initiatives and processes. It is important to note, therefore, that the respondents are from a particular segment of the citizenry (those that are politically involved and/or active community volunteers) and are, therefore, not representative of the population of Cormorant Island as a whole.

APPENDIX 5

Recommended process design steps for co-management

A. Preparation

1. conduct background research re. popular resource use and management systems (Renard, 1991)
2. approach local leaders for upfront support and advice on how to proceed
3. identify major interests (those affected and those with the power to implement and/or block implementation)
4. seek representatives of those interests
5. consult agencies, organizations and businesses to develop a sense of who is viewed as a credible leader or spokesperson or if they prefer to enter into a process to select a representative for themselves
6. identify mechanisms to enable participants to represent their constituencies
7. stakeholder input re. who the stakeholders are, what the problems, issues and potential solutions might be
8. parties agree to participate and that there is a need for a public involvement process (issues to resolve and hope that a consensus or compromise can be reached)
9. identify incentives for participation (and negative impacts of not engaging in dialogue)
10. define the issues clearly, clarify roles and responsibilities, establish the ground rules for operating
11. agree upon clear objectives; scope and authority of the process
12. agree upon guiding principles (eg. selection of priorities from the above list or addition of locally relevant principles)
13. define what constitutes consensus or agreement (decision-making mechanisms)
14. agree upon the process structure (meeting formats, group structure, resource requirements etc.)
15. agree upon protocols for attendance and information sharing/confidentiality
16. agree upon a facilitator and/or chair and their role
17. establish timelines
18. allocate time for participants to appreciate each other's values and interests
19. agree on milestones and target dates
20. confirm individual representatives accountability if they are to represent a group or constituency and mechanisms for feedback
21. agree upon how participants will act upon the agreement reached
22. determine what will happen if an agreement is not reached (fallback)

Carlos (1997) notes that this initial stage is extremely important because it is difficult to recover from a bad start.

A. The Process Itself

1. ensure adequate resources to support the process are in place
2. establish facts first, revisit common ground (objectives) and then discuss issues (focus on issues rather than personalities,

genuinely listen to one another)
3. reach agreement on principles/objectives/ideal outcomes around issues and explore what these commitments mean in practice
4. develop an action plan for building agreement
5. formulate options/alternative scenarios for discussion
6. record agreements as they are reached
7. may require some conflict resolution and/or training in negotiating and consensus building

A. Implementation and Monitoring Agreed Upon Action

1. identify who is responsible for what
2. propose an implementation schedule
3. make funding arrangements
4. establish a process for review and, if necessary, revision/renegotiation and/or continued discussion in the future (same or related issues)
5. agree upon an enforcement mechanism if needed

Appendix 6

SCED Principles

Are Alert Bay organizations actively pursuing the principles of SCED?

1. Living within Ecological Limits

Most organizations in Alert Bay do not have an environmental monitoring program and, therefore, are not able to establish when ecological limits have been reached. Some monitoring is being conducted by KTFC and ICNRC. The activities of these organizations are supported by the ‘Namgis First Nation and Village of Alert Bay. ‘Namgis First Nation and MTTC have also conducted monitoring and assessment activities in the past. Further, there is a significant amount of local ecological knowledge about the state of local ecosystems. Particular emphasis has been placed, however, on harvested species and this information is not collected in a comprehensive and coordinated fashion.

Leaders are generally not aware of (or not concerned with) the status of the area’s blue and red listed species. In fact sarcasm about the issue of endangered species and other conservation issues was evident in some interviews. When asked if they were aware of any endangered species in the area one person replied "Indians", another "fishermen". Responses to the endangered species question may be a reflection of priorities (e.g. a higher level of concern for the loss of culture and way of life than for other species in the surrounding ecosystem) or of lack of knowledge (e.g. about the status of species not of direct interest to/use to community members).

Both the Village of Alert Bay and First Nations organizations such as Whe-La-La-U have considered their limits to growth. The limits considered, however, have been primarily the geographical limits of their jurisdictions rather than ecological ones. Further, the question "How much is enough economic development?" has not been asked or answered, relating to the absence of a planning process and clear goals and objectives.

Ecological limits appear to be a consideration in community tourism planning, however, with Tourism Alert Bay representatives acknowledging that tourism development must follow the "basic laws of working with the environment" (O5).

Overall, there appears to be limited compliance with the principle of living within ecological limits. Although monitoring of species and

habitats of particular interest has been undertaken by some organizations, a comprehensive ecological monitoring program has not been put in place. Efforts of the ICNRC to collect environmental information show some promise of moving in this direction (an ecosystem-based approach to monitoring).

2. Ongoing Action Towards Environmental Protection and Restoration (Stewardship)

Cormorant Island residents and organizations are involved in actions of environmental stewardship on an ongoing basis. Stewardship is a philosophy that is compatible with the traditional Kwakwaka'wakw worldview, or concept of Aweena K'ola - living at one with the land and sea. Aweena K'ola is a key principle of organizations such as the KTFC (KTFC, 1998). Environmental stewardship has been a component of the CED plans of organizations such as the 'Namgis, MTTC, KTFC and the Village of Alert Bay (Village of Alert Bay, 1996).

Stewardship activities tend to be focused on environmental problems also of social, cultural or economic significance. For example, Cormorant Island citizens and organizations have participated in land use planning processes, calling for the protection of places they consider sensitive or important for ecological, recreational and cultural reasons. Protected areas are seen to be linked to the area's growing tourism industry. Attempts to protect nearby Hanson Island through the Central Coast Land and Coastal Resource Management Planning process provide an excellent example. Litter clean-up is another area of ongoing environmental activity in the community. Again, the motivations for clean-up are a mixture of environmental responsibility, economic self-interest (e.g. the tourism industry), and community pride.

Local organizations have also been active in attempting to restore habitats that have been damaged in the past. Emphasis has been placed on restoring the productivity of fish-bearing streams. Other measures taken to protect and enhance fish populations include hatcheries and voluntary reductions or closures of fisheries on threatened stocks. In some cases food fisheries have even been curtailed.

Organizations such as the MTTC, KTFC and 'Namgis First Nation have lobbied for policy and operating changes in environmentally harmful industries continuously over the years. The MTTC's involvement in a 1986 dispute over logging plans in Kingcome Inlet, for example, resulted in improved environmental practices and increased opportunities for local employment (Cassidy and Dale, 1988). Both the MTTC and KTFC have carefully monitored pollution from nearby fish farms and the 'Namgis First Nation has expressed concerns in writing about the use of harmful chemicals in a new net washing business in the Village.

Recycling/waste management is being addressed by both the Village and the 'Namgis, in part due to the mandated closure of the Island's landfill and in part due to the actions of concerned citizens. Respondents recommended improvements that could be made to the recycling program.

Table 6.1 Compliance with ecological principles

Have actions been taken to address ... ?				
Indicator:	'Namgis	Village	Tribal	Cormorant Island
Waste	Y	T/Y	?	Y/T
Pollution	Y	N	Y	Y/T
Energy	T	T	T	T
Sustainable harvests	T	T	T	T
Species at risk	T	T	T	T
Monitoring ecosystem health	N/T	N	T	T
Protected areas	Y	Y/T	Y	Y

Identifying limits to growth	N	Y	Y/T	Y/T
OVERALL COMPLIANCE	T	T	T	Y/T

Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

See Chapter Five (there is some concern that resistance to selective fishing techniques contradicts other evidence of resource stewardship). Despite significant environmental action in Alert Bay (see Table 6.1), activity has been somewhat sporadic and several critical issues have yet to be adequately addressed. Fish stock depletion (also see Chapter Five), unsustainable forestry practices, loss of biodiversity and discharges of untreated sewage continue. In some cases outside influences have been responsible for initiating environmental actions (e.g. BC Hydro energy conservation program, Ministry of Environment sewer upgrade requirements). There is room, and a need, for more local activity in environmental monitoring, protection and restoration.

3. Self-reliance and Community Control

As with other principles, steps have been taken to increase local self-reliance. At the same time, there is much more that could be done. Further, the actions and policies of some organizations may serve to increase rather than decrease dependency.

Table 6.2 Self reliance and community control

Have actions been taken to address … ?				
Indicator:	‘Namgis	Village	Tribal	Cormorant Island
Identifying strengths	T	T	T	T
Reducing dependency	T	N	T	T
Import substitution	N	N	N	N
Individual self-reliance	T	N/T	T	T
Local food production	T	N	T	T
Local energy production	N	N	N	N
Local ownership	Y	T	Y	Y
Local investment	T	N	N	N
OVERALL COMPLIANCE	T	N	N/T	N/T

Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

3.1. Dependency

Awareness of Alert Bay’s economic dependency on externally controlled companies and governments is high among both leaders and citizens. Limited attempts have been made to reduce this dependency. Most organizations continue to be heavily reliant themselves, particularly on government support.

Dependence on Outside Firms

Prior to the 1996 fleet reduction approximately 50 Alert Bay fishermen were employed on vessels for which major fish processor, BC Packers Ltd., held complete or majority ownership. Others have received financing from the firm and are left with longstanding obligations for product delivery. This dependency has left the community vulnerable to job losses and lower prices, both of which have occurred. Alert Bay organizations are uncertain as to how they can act to reduce this dependency. Arguments have been made for community allocations of fishing licenses. Some licenses have been allocated to the KTFC. Further, organizations such as MTTC have assisted fishermen to look for sources of financing other than the fish processing company (primarily government).

Forestry activities are also largely dependent on major forestry firms (e.g. Canfor) controlled outside of the area.. However, the ‘Namgis and others have been working to establish partnerships (rather than dependency relationships) with these companies.

Dependence on Government

Alert Bay is also highly dependent on the provincial and federal governments - for employment, personal income, development funding, infrastructure and even basic municipal operating expenditures. Some organizations also continue to look to government for solutions to their social and economic problems.

> I don’t see First Nations putting money into any kind of sustainable development… What I see is they are trying to get everything for nothing. They are not putting in their own funds. In order for something to work you have to have an investment in it (T4).
>
> A significant injection of capital from the Federal government in financing these two projects will give Alert Bay a new lease on life and partially compensate us for the callous treatment that we have endured by our Federal government...With your help Alert Bay will become a sustainable community. Without it, the alternate is too bleak to consider.
>
> - Village of Alert Bay Brief to Parliament Standing Committee on Forestry and Fisheries, Jan. 5, 1998
>
> ..there’s so much blaming going on ... but, no matter what the government has done, we’ve still got to get on with it. We need to take responsibility (N5).

Although it is recognized that local financial resources are limited and that restitution, particularly to First Nations, is due after more than a century of government policies that have created conditions of dependency, an increased emphasis on self-reliance is required. The apparent willingness of residents to invest in a community loan fund for financing small business ventures has not, for example, been capitalized upon. The ‘Namgis First Nation has, however, sought permission to harvest surplus Nimpkish River runs in an effort to increase the self-sufficiency of their enhancement program. There is a need and increasing desire within the community to play a lead role in CED and resource management projects (as opposed to being led by senior government). Respondents also suggested that governments demand more accountability for funding received.

3.2. Leakage of Capital, Resources and Spending Power

Due to dependency on large, externally controlled corporations within the resource sectors, capital and resources tend to flow out of the community and the region. Further, many residents leave Cormorant Island to shop for "almost everything". Respondents felt that opportunities for import replacement were limited. However, outside contractors are hired to do work that respondents argue could be done by local people. Some suggest that two important products, energy and produce (e.g. vegetables) could be produced locally, but no serious investigation of these opportunities has taken place. Respondents felt that most residents invest their money locally (with the local credit union). However, a credit union representative stated, "we’re only seeing about 50% of the total deposits" (O6). Some are placing their funds in outside banks located on reserve for tax benefits. The establishment of the ‘Namgis Branch of the Alert Bay & District Credit Union may reduce outside investments in the future.

Although a detailed leakage analysis has not been completed, it is clear that the issue is significant. Actions taken include occasional "buy local" campaign efforts and value-added fisheries and forestry initiatives. Participation in the treaty process is intended to increase local ownership of land and resources in the medium to long term, therefore increasing self-reliance and reducing leakage. In the short term there is a substantial amount of effort being placed on increasing local involvement in resource management decision-making, which may

lead to help to reduce resource-related leakage in the future (see Chapter Five). See also Vodden (1999b) - Plugging the Leaks.

3.3. Self-reliance of Individuals and families

While some individuals and families are a demonstration of self-reliance, with multiple income sources and active participation in the informal economy, overall dependency of individuals and families on government transfer payments is increasing (see Vodden, 1999).

To reduce dependency on transfer payments, income from the domestic economy, employment or self-employment must be increased. Efforts to create opportunities for employment are underway in a number of sectors as discussed above. Self-employment is seen as critical to creating greater individual self-reliance. "People have to get some kind of an idea how to survive, learn how to be entrepreneurs" (T1). Yet, in some cases, entrepreneurialism has been stifled by Alert Bay organizations (see Entrepreneurialism below and Vodden, 1999b - Encouraging Entrepreneurship). Programs to facilitate the informal economy are underway in a number of First Nations organizations. These programs also help to increase individual and family self-reliance (see Vodden 1999b - Strengthening the Informal Economy). Finally, the ‘Namgis Health Centre has initiated a program to assist long-term social assistance recipients in reducing dependency, through career planning and job training.

4. Equity and Fairness

Indicators of equity and fairness examined included affordable housing, nutrition, income distribution, and Aboriginal land claims. Housing and nutrition needs are largely being addressed by Alert Bay organizations. A shortage of housing exists, particularly rental and on-reserve housing. The ‘Namgis First Nation is working to address this issue and has demonstrated a commitment to providing housing to members of all incomes. Subsidized housing is available (e.g. for elders) and loans are provided for home construction. Due to concerns about the state of the economy, consideration is being given to waiving the $5,000 down-payment requirement (several Council members expressed their belief that the requirement should be dropped, although no formal changes to the policy had been made at the time). The Village has provided housing for the elderly and low-income residents in the past, but has not undertaken projects in this area in many years (also see Vodden, 1999b - Housing).

Table 6.3 Fairness and equity principle

Have actions been taken to address ... ?				
Indicator:	‘Namgis	Village	Tribal	Alert Bay
Affordable housing	Y	N	N	T
Nutrition	Y	N	T	T
Income distribution	N	N	N	N
Land claims/Aboriginal rights	Y	Y	Y	Y
OVERALL COMPLIANCE	Y/T	N/T	N/T	T

Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

There is no formal "food bank" or other food provision system for the needy in Alert Bay. Some concerns were expressed regarding the ability of the poor (e.g. those on social assistance) and those who are not able to access or process food fish to feed themselves adequately. Nutrition requirements in Alert Bay, however, appear to be largely met due to the strength of the informal economy (see Vodden, 1999b - Food and Nutrition and Strengthening the Informal Economy).

Interview respondents disagreed about whether income was fairly distributed in the community. Village respondents in particular felt that it was not. Statistics show that income and employment is much higher within the municipality than on reserve (see Vodden, 1999) and that this discrepancy is growing. Changes in the fishery have contributed to this trend:

> The way it works is the rich get richer and the poor get poorer. In fishing nothing is cheap, the boats, nets, licenses, and repairs are all costly. Now you have to have one license for every area you fish.

Amber Alfred and Steve Barnes,

Rock Talk, July 30, 1998; 9

First Nations fishermen living on reserve have been hardest hit by policy changes. Among those who recognized that income discrepancies exist, however, it was generally agreed that little had been done by local organizations and governments to address them. Some wondered whether it was their role, or if anything could be done. One respondent expressed concern that, in fact, First Nations organizations would exacerbate the differences when delivering employment and development programs: "I fear that only certain families will benefit." Activities that enhance the informal economy, on the other hand, tend to be more common on reserve. These activities, along with a community ethic of sharing, help to offset discrepancies in cash income:

> ...all of the food fish he gets for our community...I asked him why he does it and he said it's good to spread the wealth around.
>
> Tyler Cranmer re. his uncle Roy Cranmer

Rock Talk, Aug. 21, 1998; 4

Interview respondents agreed that the settlement of First Nations land claims is an important equity and fairness issue. For over a century First Nations have not only been displaced from their homelands, mistreated and subjected to cultural genocide, but they have been put at a distinct disadvantage in their participation in economic activities. The ways that this has taken place are too many and too complex to discuss at this time. The implementation of legislation that prohibited First Nations owned hand logging firms from operating off reserve and inability to obtain financing due to the reserve land ownership structure are two specific examples (see Vodden, 1999). The settlement of land claims is seen by community leaders, both Native and non-Native, as one way that this systemic inequity can begin to be corrected:

> When the white settlers conquered the land known as Canada, they displaced the rightful owners from their land, restricted them to miniscule areas known as reservations and imposed laws, on the people that the colonials derogatorily referred to as red skins or Indians, that were demeaning and punitive... The Canadian Aboriginals have shown remarkable restraint and patience in waiting to reach a negotiated settlement to their claims.

Mayor Popovich, Bay Watch Jan. 1999; 4-5

> Our interest right now is in negotiating interim measures that will help us take a meaningful part in the community. We don't want to stop development, but we need to be compensated for what we have lost.

Chief Councilor Bill Cranmer, 'N̲am̲g̲is First Nation

Vancouver Island Communities Institute, 1998

Respondents expressed some doubt about the land claims process and whether it would ever lead to a successful resolution, but overall there was widespread support for negotiations. The 'N̲am̲g̲is First Nation, Village of Alert Bay and other organizations in Alert Bay are actively involved in, and supportive of, the current treaty process. In fact, community leaders are placing great hope in it, and investing significant resources accordingly: "The treaty might be the only thing that'll be able to save us" (N2).

Finally, concern for sustainable development and the youth of the community, along with actions of environmental stewardship indicate, that intergenerational equity is being taken into consideration.

5. Public Participation

Table 6.4 Broad-based public participation

Have actions been taken to address ... ?				
Indicator:	'Namgis	Village	Tribal	Alert Bay
Open planning process	T	T	T	T
Open meetings	Y	Y	?	Y
Accessible information	T/N?	Y	T/N	T
Varied avenues for participation	Y	Y	?	Y
Participation actively encouraged	T	T		T
Diversity of participation	T	T	T	T
Input fairly considered, acted upon	T/N	T/N	T	T/N
OVERALL COMPLIANCE	T	T	T	T

Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

Alert Bay organizations recognize that public input is needed and there is an apparently increasing demand for participation from citizens. One respondent recalls, for example, that NIDA worked because it came from the people, through "many months of public meetings" (T4). Another stated that: "In the past we used to have probably 15 people attend a general meeting. Now, today if we had one it'd be over 150… People are starting to get involved, and making sure the Band is accountable" (N4).

For the 'Namgis Council participation is sought through Council meetings that are open to members, general community meetings, and committees. People can phone, write letters, or approach a Council member they know. A land claims newsletter is planned.

Village Council meetings are open and advertised on both the community channel and in the monthly community newsletter 'Baywatch'. The newsletter, published by the Village since 1998, also includes reports from all Council members on their activities over the month as well as information about community events and other organizations. The publication has made a substantial improvement in the amount of information available to citizens. The Village Economic Development Commission also held open community meetings in 1996 to brainstorm CED ideas.

The MTTC has also used newsletters to communicate with members. The MTTC newsletter, according to one source, has been discontinued due to financial difficulties. The MTTC/KDC Forestry Program, U'Mista Cultural Centre, ICNRC and Whe-La-La-U also put out newsletters. Community cable (TV), mail-outs and billboards are used to publicize events.

However, respondents shared significant concerns about communication, information and public participation. Members of the 'Namgis Council themselves are not informed about the economic development efforts of their own organization. "I've been trying to get working with the community economic development program and finding it really difficult to get any answers from anyone" (N4). Further, respondents report that members are cautious about sharing their concerns. "In the past I've noticed that people are afraid they're gonna lose things if they come up and make some statements that affect the Council" (N4). Community meetings have been held by both the

‘Namgis and the Village of Alert Bay to identify opportunities for community development, yet little follow-up on public input has occurred. This is likely to have a negative impact on future participation. Recommendations made to Council from a ‘Namgis brainstorming meeting were not endorsed, for example. Further, there was no Council participation in the meeting itself, demonstrating little commitment to the consultation process. One ‘Namgis respondent stated that: "We listen to them on minor things, but for the bigger picture we want to go on our own" (N1). Another expressed reservations about the notion of community participation: "The meeting tonight about the Big House is a sign of the problems today. In the past a group of hereditary chiefs, the elders, would have said ‘we’ll put it here’ and it would have been raised" (N2).

Concerns have also been raised about the Village of Alert Bay, including the degree to which Council takes the recommendations of its citizen Advisory Planning Commission into serious consideration and the lack of follow-up from 1996 community meetings.

Among organizations representing multiple First Nations, or members of several individual First Nations, sharing of information appears to be a particular challenge. One respondent explained: "there’s a communication gap. They’re not reaching all of the people, in terms of what they want to do. They should include First Nations from all these territories when they’re talking about fish farming. They’re now talking about leasing clam beds to people. They are talking about those kinds of things, and they are doing it without consulting the First Nations. Although, they have people on the Board, those people aren’t important" (T4). Likewise, individual First Nations do not always chose to share information with "umbrella" organizations such as KTFC, MTTC and Whe-La-La-U.

Further, public participation often does not include the youth of the community (as reflected by the profile of interview respondents). Some argue this is because of lack of interest. "I don’t think they’re worried about it" (O4). Women are active in community affairs but are also underrepresented in leadership positions (e.g. boards, Council). However, they make up a significant percentage of the paid staff of local organizations and governments. "I have had people comment to me that they feel it is unfortunate that there isn’t women on Council and I don’t know why it’s an issue" (V4).

A final concern is that volunteer energy is limited and economic hardship has placed a strain on those who are normally willing to offer their assistance with community matters: "I’d love to take time out to help ... but how do I make a living" (O5)? "It seems like the same people who do everything" (N1). Others point out that without a planning process, limited volunteer resources are not efficiently used. "I’m hearing an awful lot of issues and we have a finite number of individuals ... we’re starting to spread ourselves too thin" (O6). "It’s open but it’s ineffective…If the process to get their involvement isn’t structured appropriately then they won’t participate, or if they see ..that it’s just more talk" (O1).

6. Economic Viability

Table 6.5 Economic viability

Have actions been taken to address ... ?				
Indicator:	‘Namgis	Village	Tribal	Alert Bay
Economic/financial viability of initiatives	N/T	N/T	N/T	N/T
Self-supporting initiatives	N/T	N	N/T	N/T
Efforts to obtain maximum value from resources	N/T	T	T	T
$ for monitoring impacts of activities	N	N	N	N
Financial support for planning	N	N	N/T	N
OVERALL COMPLIANCE	N/T	N/T	N/T	N/T

Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

Long-term financial viability is a significant concern for all organizations and initiatives in Alert Bay. Initiatives are not generally self-supporting but rather rely heavily on donations and government contributions that are short-term in nature. While others have survived, according to interview respondents poor financial management and/or insufficient funding have resulted in the failure of a number of Cormorant Island CED initiatives, including the 'Namgis aquaculture project, the 'Namgis processing plant and the Musgamagw Demonstration Project.

Although organizations regularly seek funding from outside sources in an attempt to ensure their financial viability, with some degree of success, efforts to create self-sufficient organizations and initiatives are limited. U'Mista Cultural Society earns a small portion of its income from memberships, admissions and gift shop sales. The ICNRC and KTFC have generated some revenue through contract services. The KTFC also raises income through license leasing, while ICNRC has long-term plan to offer research-based tourism products. Finally, the 'Namgis salmon enhancement program hopes to support a portion of its activities through the harvest of surplus stocks and has lobbied DFO to that end. While the majority of project financing is raised from outside sources, some community projects, such as the Lions boat launch and children's park, are financed through local fundraising efforts (e.g. raffles, bingos).

Like CED projects, for most organizations staff and financial resources for ongoing CED planning are scarce. The 'Namgis First Nation and MTTC have some financial resources dedicated to economic development. Dollars have generally not been allocated to planning exercises, however, with the exception of MTTC forestry and tourism sector studies conducted in 1998. Nor have funds been invested in follow-up monitoring of CED efforts. Projects intended to diversify and add value to natural resources such as the CIEDS mill initiative may contribute to the overall economic viability of the economy in the medium to long term.

7. Capacity Building

Most organizations in Alert Bay are engaged in some form of capacity building and human resource development (see Vodden,1999b). Only the Village and CIEDS have not focused on this area. However, more emphasis has been placed on labour force skills development than on entrepreneurial and leadership training. Therefore, responses of "no" or "to some degree" were assigned for the majority of the capacity building indicators listed in Figure 6.6. The exception is the 'Namgis First Nation, which has offered band management training programs on multiple occasions. Training for members of Chief and Council or CED professionals has not, however, been provided. "Being a counselor is on the job training, you learn as you go along" (N4).

Table 6.6 Capacity building

Have actions been taken to address ... ?				
Indicator:	'Namgis	Village	Tribal	Alert Bay
Informed citizens	T	Y/T	T	T
Opportunities for CED training	N/T	N	N/T	N/T
Entrepreneurial training/support	T	T	T	T
Leadership training	Y/T	T	T	T
Other training/education programs	Y	N/T	Y	Y/T
OVERALL COMPLIANCE	Y/T	T	T	T

Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

Alert Bay citizens are kept informed through newsletters, announcements and community meetings (see Public Participation above). Limited training opportunities in community leadership, CED, resource management, and entrepreneurship have been offered by First

Nations organizations such the 'Namgis, MTTC and U'Mista Cultural Society. Advisory and mentoring services to entrepreneurs have been informally provided (vs. a formal entrepreneurial support program). Regionally, Community Futures Development Corp. has played a major role in entrepreneurial training.

1. Long Term Planning and Action

   Alert Bay organizations, particularly the 'Namgis First Nation and other First Nations organizations have demonstrated a long-term approach to development. The treaty process and NIDA plan provide excellent examples. NIDA has been the guiding strategy for 'Namgis CED efforts for more than 25 years.

   Table 6.7 Long term planning and action

Have actions been taken to address … ?				
Indicator:	'Namgis	Village	Tribal	Alert Bay
Planning experience	Y	Y	Y	Y
Long term vision (10 years +)	N	T	T	N/T
5 year plan	N	T	N	N/T
Annual/short term plan	N	N	T	N/T
Periodic evaluation of process	N	N/T	N/T	N/T
Overall long term approach	Y/T	T	Y/T	T/Y
OVERALL COMPLIANCE	T	T	T	T

   Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

   Interview respondents and documented sources also made frequent references to the need for long-term thinking:

   I think we have to start looking at our younger generation, and start giving these young people, turning them on to education and getting educated in every capacity. We're talking long term (T4).

   Short-term jobs are not the right approach to employing our people (MTTC, 1988).

   Long-term planning is essential. Treaties will allow for better long-term planning ... (Cranmer, 1998; 8).

   We have to make sure we're prepared for self-government before it comes along … We have to plan ahead (N4).

   A "go slow" approach to development is common: "It's a slow process" (N1). "I think we're going to come to a good place...but it's not going to be fast moving" (N5). Another community leader cautioned in a tourism meeting that promotion not exceed the community's ability to deliver the required facilities.

   Others, while advocating a long-term approach, disagree that Alert Bay organizations are acting with the long-term interests of citizens in mind. Short-term "make work" projects were a major concern: "It's important that people that are getting slowly bumped out of the fishing industry have a long-term plan, with education. What I see right now, what I see is them cutting bushes, and chopping wood for people. What kind of plan is that? I disagree with that" (N4).

All organizations have some prior experience with CED planning (with the exception of Whe-La-La-U). However, the absence of a current planning process among most organizations results in limited compliance with the principle of long-term planning and action. The Village of Alert Bay developed a vision and long-term strategy, but this Strategy has been put on hold. Periodically updated, consultant-authored economic development strategies have provided a basis for planning and evaluation, but a weak one in the absence of action plans for implementing such strategies and public support. Some First Nations organizations are currently involved in planning. KTFC has launched a "holistic management" planning exercise, beginning with a vision statement or "holistic goal" and U'Mista Cultural Society engages in annual planning and reporting processes on a regular basis. MTTC exploratory studies on opportunities in the forestry and tourism sectors represent initial planning attempts in these sectors but do not amount to an overall CED planning process (see also Chapter Four - The CED Process).

9. Diversity

In general there is an apparent recognition and respect of the diversity in the community, particularly cultural diversity (see Table 6.8). In fact, diversity and the "interaction between Native and non-Native residents" was cited as one of the characteristics that the make the community of Alert Bay special and unique. Several respondents suggested, however, that cross-cultural understanding should be increased:

You know we're all different... We gotta understand there is a difference. We can work together, but ... we have political differences (N2).

We have to understand that we do have two communities. We have two different cultures (O6).

I think in order for us to work together properly, there has to be an equal sharing of culture, or equal sharing of information and culture … in order for the non-Native to appreciate me, he has to learn what happened to me, why they call me a lazy bum and stuff like that. They have to understand that. All these things that the government has done to us that has limited us and taken away the esteem (T1).

Table 6.8 Diversity indicators

Have actions been taken to address … ?				
Indicator:	'Namgis	Village	Tribal	Alert Bay
Diversity of participation*	T	T	T	T
Diversity of economic sectors	Y	T	T	Y/T
Diversity of employment types	Y/T	T	Y/T	Y/T
Diversity of community respected Ce	Y/T	Y/T	?	Y/T
OVERALL COMPLIANCE	Y/T	Y/T	Y/T	Y/T

Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

Recognition of the diversity in the community has not resulted, however, in a wide diversity of participation in positions of

community leadership and decision-making. See Public Participation above (*).

Historically the Alert Bay economy has been heavily dependent on the fishing industry. At one time many residents spent part of the year fishing and the remainder logging. Residents were accustomed to "economic diversification" at the household/individual level just to make ends meet. As changes in the logging industry made this more difficult, dependency on the fishery and seasonal assistance from the government increased. Today, there is a growing awareness among Alert Bay organizations of the need for economic diversification:

Over the past few years we have had to face the reality that things will never be the same again. Commercial fisheries will provide a fraction of the jobs we enjoyed in the past. We are left with the alternatives of pulling up stakes and moving to more affluent locations or to diversify our economy and create jobs in other fields of endeavor. Diversification is the most popular and feasible alternative (Popovich, 1999b; 4).

This awareness is reflected through the initiatives being pursued in a variety of industrial sectors, providing a range of employment opportunities (e.g. artists, machinists, fishermen, silviculture workers, guides, researchers, entrepreneurs). Emphasis has been placed, however, on three major sectors (fisheries, tourism, information/research/education, and to a lesser extent forestry, value-added, arts and crafts), particularly tourism. With declines in the fishing industry there is some risk of developing a new dependency on the tourism sector.

10. Cooperation/Collaboration

Table 6.9 Indicators of cooperation/collaboration

Have actions been taken to address … ?				
Indicator:	'Namgis	Village	Tribal	Alert Bay
Collaboration with other CI organizations	Y/T	Y/T	T	Y/T
Collaboration with outside orgs/agencies	T	T	Y	T
Collaboration with industry/private sector	Y/T	N	Y/T	T
Collaboration with other communities	Y	Y	Y	Y
First Nations/non-First Nations cooperation	Y/T	Y/T	T	Y/T
OVERALL COMPLIANCE	Y/T	Y/T	Y/T	Y/T

Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

Efforts at cooperation on Cormorant Island are significant and increasing, yet many argue that a more concerted effort is required. Cooperation should be strengthened, particularly among local community groups, First Nations and non-First Nations. Although 11 organizations involved in CED were identified during this research, no common plan or direction between them has been established: "I'm now wondering if we do not require some sort of umbrella organization to cover al of these individual organizations ... but I'm sure there's politics associated as to why that won't happen" (O6). There is a sense of territoriality among organizations, a tendency to protect one's own mandate and a concern that what is good for the whole may not be good for the segment of the community that a particular organization is meant to serve or represent.

Opinions vary among respondents regarding relations between the "White end" and the "Native end" of the Island:

In our area the ‘Namgis First Nation has a good working relationship with the local government at Alert Bay. We support the natural resource learning society (ed. ICNRC) at Alert Bay and are working with Canfor... We will work with other organizations to develop a variety of economic opportunities, but we must always look to the long term to see what’s best for First Nations in their territories (Cranmer, 1998; 8).

There’s the First Nations versus, versus the other half of the island ... they do try and work pretty good together ... but there’s still some, some problems there and that’s gonna remain there ... in terms of history. The two, the two communities get along pretty well actually (R4).

Our clear impression is that the majority of interested people outside of Alert Bay believe the levels of cooperation and coordination between the Native and non-Native communities in Alert Bay are high, productive and a model for other less cooperative situations. Locally, however, we know that much more must be achieved cooperatively if progress is to be made (Ronald and Associates, 1990; 38).

Overall relations appear to be good, particularly among individual community members. Political differences exist and that make organizational cooperation difficult. However, the level of cooperation appears to be increasing. Both the ‘Namgis First Nation and Village of Alert Bay are working to overcome barriers to cooperation and both governments have entered into several collaborative projects in the mid-late 1990s, including the ICNRC and CIEDS (in 1999 further collaboration included the formation of a Tourism Strategy Team for the Island and the "Alert Bay Community Alert" meeting, a first step at Island-wide strategic planning). Further as previously discussed, the Village of Alert Bay strongly supports treaty negotiations.

You know . . . by the end of this year you will see people like myself going down to the First Nations and sitting in the observer at the counselor meetings. I can feel that opening already, you know, that's going to happen. And the other way around. Yeah. The opening is there and that's the biggest change I've seen since I've come to the community (R2).

I think we have to get really more involved now and really start working together. Somehow, a reconciliation as the governments like to call it. Because the local communities and the First Nation people aren’t going anywhere (N4).

The issue of Native-non-Native cooperation, however, is not one that will be resolved quickly or easily. "Trust and acceptance is very difficult" (KTFC workshop participant). One external consultant observed, "... the Native and non-Native communities, while sharing many values, obviously have deep and historical cultural differences..." (John Ronald and Associates, 1990; 8). Time constraints, particularly for First Nations representatives, appear to be a significant problem: "I’ve been on Village Council for one year. We’ve asked for a meeting with the ‘Namgis Council four times but it hasn’t happened" (V1). "It is difficult to get First Nations to the table. There’s just too much on the go…" (R1).

Suggestions for improving Native/non-Native relations raised by respondents center primarily around increasing respect and understanding between individuals within the community and community organizations. Specific recommendation included cross-cultural awareness training (e.g. a protocol workshop), being more respectful, and softening the language used by both "sides". Overcoming apparent divisions within organizations will also be necessary before collaboration with others is possible. Cooperation may be facilitated through the establishment of a common vision.

Cooperation between non-First Nations community organizations/governments and Tribal and multi-Nation organizations is less frequent. Regional cooperation has generally been between non-First Nations communities and between First Nations, not both. Organizations such as MTTC and KTFC have, however, recently joined the region-wide North Island Fisheries Centre initiative, and have also participated in collaborative regional forest and recreation initiatives (e.g. North Coast Trail).

First Nations organizations have also collaborated to a limited degree with private industry. The most significant relationship may be that between CanFor and the ‘Namgis First Nation. Through the Nimpkish Resource Management Board the ‘Namgis and Canfor have collaborated on watershed restoration and silviculture training and contracting of ‘Namgis members (Vodden, 1999; Vodden and Gunter, 1999). KTFC has attempted to establish partnerships with WhiteSpot for the processing and supply of seafood products and MTTC and its individual member Nations have collaborated with forest companies on several projects (e.g. Kingcome Band/Scott Paper silviculture program) (Cassidy and Dale, 1988).

Examples of collaboration with outside agencies and organizations, particularly governments, are numerous on Cormorant Island. Local organizations work with resource management agencies on a regular basis, providing services and input and receiving project funding for their work. Relations with senior governments (particularly DFO) tend, however, to be based upon relationships of mutual benefit (e.g. projects) rather than trust and understanding. There remains a great deal of strain and room for further relationship building:

Non-Aboriginal governments claimed a responsibility to govern the marine and other resources of our territories unlawfully and without any effort to negotiate with the Kwakiutl who had exercised their governance rights and responsibilities since time immemorial. Had this intrusion at least led to a satisfactory protection of the resource and the communities dependent on the resources, our outrage might be mitigated. However their unlawful assumption of jurisdiction has presided over the severe reduction of many species and the destruction of critical habitat (KTFC, 1998; 6).

Cormorant Island organizations have also developed strong partnerships with academic institutions, most recently through the Inner Coast Natural Resource Centre (ICNRC). The ICNRC has 17 "external partners", including multiple government agencies, departments from three major BC universities, and EcoTrust Canada, a non-government organization. U'Mista Cultural Centre and the Alert Bay Marine Research Society also have a long history of collaboration with outside research institutions.

Finally, collaboration with other communities is relatively strong. Organizations such as MTTC and KTFC are multiple community in nature. The 'Namgis participate in most of these multi-First Nation types of organizations. These collaborative entities have not operated without difficulty, however. Communications between the organizations and individual member Nations has been problematic in many cases. The Village of Alert Bay also participates in many regional organizations, including the Regional District, Community Futures Development Corp., Community Resource Board and others. The Village's Economic Development Commission initiated the ICNRC, a regional initiative. Local organizations have also been instrumental in the formation of the North Island Fisheries Centre.

See Chapter Five for more on cooperative relationships as they relate to fisheries.

2. Integrated

Table 6.10 Indicators of an integrated approach

Have actions been taken to address … ?				
Indicator:	'Namgis	Village	Tribal	Alert Bay
Integrated CED strategy (Soc, Ec, Env, Cultural)	T	T	Y/T	T
Integration of local initiatives, sector strategies	N	N	N	N
Monitoring of social, cultural, enviro impacts	N	N	N	N
Integrated criteria for initiative selection/approval	T	?	T	T
OVERALL COMPLIANCE	T/N	T/N	T	T/N

Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

Criteria for determining if CED projects and plans follow an integrated approach require that a plan or projects be in place to evaluate. As there is currently no real CED plan in place in Alert Bay, or a formal process for selection and monitoring CED projects, evaluation is difficult. In fact, the absence of an integrated strategy implies a negative evaluation:

> We need to have integrated development strategies for forestry and fisheries. Now if we had policies in place or a statement of what the initiatives are in forestry and fisheries, then everyone can work together. Right now everything is all over the place and there's no integrated approach to anything (N5).

However, there is ample evidence of the application of an integrated philosophy, often informally, in past strategies and in recent projects and actions. The KTFC has explicitly adopted an integrated or "holistic" approach in their current planning process. The Village of Alert Bay Economic Restructuring Strategy, NIDA Plan and Musgamagw Demonstration Project each recognized the need for an integrated approach and included social, economic, environmental and cultural considerations. However, none of these strategies are currently in effect.

While, there appears to be no formal process for evaluating the merits of initiatives that are proposed, projects have been turned down by both the 'Namgis and Tribal organizations because of their environmental, social or cultural consequences (e.g. aquaculture joint venture proposal). Therefore, some criteria are being applied however informally. Interview responses confirm this: "We're worried about everything that comes into our territory ... we like to question it to the end, to make sure that it's safe" (N1). Tourism Alert Bay representatives also stated their commitment to tourism development that is ecologically sound and culturally/socially appropriate.

Overall, all organizations appear to be in alignment with holistic or integrated thinking but this principle has not been widely or formally applied due to the lack of a coordinated planning and monitoring process.

12. Qualitative Development

Table 6.11 Indicators of qualitative development

Have actions been taken to address … ?				
Indicator:	'Namgis	Village	Tribal	Alert Bay
"Spreading the wealth" to those in need	Y/T	N	T	T
Well-being, emotional, spiritual, natural wealth	Y/T	N/T	Y/T	T
Economic development as a means not an end	T?	T?	T?	T?
Meaningful and satisfying work opportunities	N/T	N	Y/T	N/T
OVERALL COMPLIANCE	Y/T	N/T	Y/T	T

Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

Once again, questions regarding qualitative development were hard to evaluate in the absence of a current strategy with clearly stated

goals and objectives.

12.1 Spreading the Wealth

The emphasis of development efforts on Cormorant Island has generally not been on one particular segment of the population (e.g. the poor). Nor is redistribution of wealth a concept many respondents were comfortable with as a role for their organizations. The only exception to this are programs of the 'Namgis Health Centre which are targeted specifically to improving the well-being (including economic) of long-time social assistance recipients. To some degree the harvesting and distribution of food fish and other goods also helps to redistribute wealth to those in need (e.g. from boat owners who are responsible for harvesting).

12.2 Economic Development as a Means to Well-being (Emotional, Spiritual and Natural Wealth)

Organizations such as the 'Namgis First Nation, Whe-La-La-U Area Council and U'Mista Cultural Society have a host of programs intended to address the health and well-being of community residents. The Village of Alert Bay, and the 'Namgis, has also hosted programs and provided infrastructure to provide for the recreational and fitness requirements of community members. The 'Namgis First Nation perhaps makes the strongest link between personal health and well-being and economic development. The 'Namgis now have a CED worker within their Health Centre, for example. Many of their CED projects provide benefits that extend beyond job creation and income generation (e.g. educational and cultural development aspects of cultural tourism and ecological benefits of restoration) (Vodden and Gunter, 1999). Although Whe-La-La-U has not yet launched a CED program, their representative was also clearly concerned about the link between economic development and personal well-being: "People have to have the esteem first before they challenge these economic ventures because without it -- this is why we don't want to take a risk" (T1).

When asked about the most important objectives of CED most respondents replied with answers related directly to economic, rather than social, ecological or cultural goals. Jobs and money/income were the common threads. Their responses included "generating local money", "people can provide for themselves within the community", "maintain community financially", "sustainable jobs with sustainable resources", "meaningful employment", "the opportunity for the Band membership to live here", and "young people can stay and work". However, concerns for sustainability, self-reliance, and maintaining the community imply secondary, or perhaps even underlying, objectives related to social and environmental concerns. Some mentioned objectives that were explicitly social in nature, including "translation of community desires" and "grassroots planning". Again, without a written strategy it is difficult to determine if the end goals or objectives are qualitative or quantitative (e.g. monetary/economic in First Nations).

12.3 Meaningful Work

Evidence of efforts to create opportunities for meaningful employment is limited, with the exception of the KTFC who have explicitly included meaningful work in their planning and Quality of Life Statement: "We want meaningfulness and stability in our work ...". Given the predominance of what are seen to be "make work" projects, this does not appear to be a priority. Education about the importance of tasks being completed, involvement in planning, and links to more meaningful training could help address this issue. Habitat and fisheries-related work, however, is seen to be meaningful by workers and organizers and has been an emphasis, particularly of First Nations organizations.

13. Recognition of Informal/Non-monetary Economy

Table 6.12 Indicators of recognition of informal/non-monetary economy

Have actions been taken to address … ?				
Indicator:	'Namgis	Village	Tribal	Alert Bay
Food supply/distribution (non-cash)	Y	N	Y	Y/T
Sharing of services (e.g. child care)	N	N	N	N

Barter	N	N	N	N
Voluntarism	?	Y	T/?	Y/T
Recognition of informal economy	Y	Y	Y	Y
OVERALL COMPLIANCE	T	T	T	T

Y= Yes (high level of activity in support of this principle). T = To some degree (medium level of activity). N = No activity. ? = response not available (conflicting or insufficient evidence).

All respondents, and the Alert Bay community at large, recognize the importance of the informal economy. Despite difficulties with restricted access to resources, resource depletion and conflicts with the formal economy, as well as the ready availability of processed goods for purchase, a healthy informal economy still exists in Alert Bay today. Many Alert Bay residents meet a portion of their essential needs, such as food and heat, from fishing, hunting and gathering activities, and help one another through an ongoing series of informal economic transactions. The food fishery has particular economic, social and cultural significance. Many residents also volunteer for community organizations, celebrations or events.

Most local organizations and governments undertake activities to facilitate the informal economy in some way. First Nations organizations are most active, particularly in the arena of food and nutrition. Their activities include freezing and distribution of food fish ('Namgis), allocation of food fishing permits (KTFC) and offering classing in the harvesting and preparation of traditional foods (e.g. U'Mista seaweed harvesting classes). Threats in their ability to harvest traditional foods such as loss of access and pollution are also being addressed through lobbying efforts. Activities such as bartering and shared child or elder care, however, are seen to be primarily the responsibility of individuals and families, rather than formal organizations. Finally, the Village of Alert Bay encourages acts of community spirit and voluntarism through their annual Citizen of the Year Award and their Bay watch publication, pointing out that: "Without the help of our many volunteers our small communities would not survive" (Councilor Myers, the Bay watch, April 1998; 2).

See also Vodden (1999 and 1999b - Strengthening the Informal Economy).

14. Collective Benefits

There was considerable uncertainty among respondents about the degree to which the 'Namgis First Nation is pursuing the interests of the collective community in their CED efforts. 'Namgis First Nation has demonstrated a preference for collective vs. individual CED ventures, in the form of Band run businesses. To the point, perhaps, that individual initiative has been discouraged:

> The band wants control of the people, to me that's the way I feel, it's a hard thing to answer, that's one of my main concerns, every time a person comes in for help, there's no interest, if it doesn't benefit the band, its not worth it, that's a really bad way to look at things, it may not be that way but that's the way I feel (N4).
>
> It's time for this band to let go of that concept and let people get into their own businesses and succeed (T4).

Some argue, however, that this preference is driven by a desire to hold on to power, even to benefit friends and family of those in decision-making positions, rather than to provide benefits to the community-at-large:

> The band doesn't want to see them get ahead ... anything run by the band can't work or hasn't worked ... someone who wants to succeed someone who's willing to put in 18 hours work, I've watched many projects with the band and people take it as a paycheck (T4).
>
> I fear that only certain families will benefit (ed. from job creation projects).

Concerns of this nature were not raised about other organizations (except one specific MTTC project).

15. Community Building

CED efforts on Cormorant Island frequently relate to the Island's character and identity, thus contributing to a sense of pride and community building. First Nations organizations stress cultural ties. The Village of Alert Bay also draws on people's sense of community, encouraging it to grow, in their "Keep our Island Beautiful" slogans, encouraging clean-up and community pride during the tourism season. Efforts such as the Citizen of the Year award and food distribution also encourage community building and the spirit of looking after one another:

> The selection committee (ed. for Citizen of the Year award) felt that all the residents of Cormorant Island should receive honourable mention for getting together the way that they have in 1998 to help our friends and neighbours in need. 1998 saw the Big House fundraising event, the Victor Hanuse fund and the Alfie & Tammy Alfred House raising fund. In all of these events the community came together with monetary and item donations of all kinds (Feb. 99 Bay watch; 2).
>
> And people all over the coast know it as the place to use the cultural centre and/or Big House. We're strongly thriving in our culture, we're known throughout, probably, coastal BC for our resurgence in our culture, and for our ability to maintain and keep it (T4).

Finally, efforts to build cooperation and minimize conflict between local organizations and segments of the community also contribute to community building and a stronger sence of community.

16. Entrepreneurialism

The level of activity in support of entrepreneurialism is considered medium for Alert Bay as a whole, although Alert Bay residents and organizations place high hopes in small business development and entrepreneurship for economic restructuring (See Vodden, 1999b-Encouraging Entrepreneurship). Formal assistance for entrepreneurs is available primarily through the Tribal Council (advisory services are provided by an Economic Development Officer). Informal support is also available through U'Mista, along with some entrepreneurial training. Regional organizations also provide assistance. Some respondents and residents argue that neither the Village nor the 'Namgis First Nation are as supportive of local entrepreneurs as they need to be to facilitate small business development. Support has taken the form of permission to operate, operating space in some cases, and letters of support. Members of both Councils, however, stressed the importance of entrepreneurship and small business to economic renewal.

The various governments and organizations in Alert Bay generally support social entrepreneurship. The importance of voluntarism and the non-profit sector is recognized. Support from community organizations come in the form of representatives on Boards of Directors, letters of support for funding applications, in-kind contributions such as space or equipment, or small donations.

APPENDIX 7

SUCCESS FACTORS

The following appendix provides a description of how responses in Figures 13 through 19 presented in Chapter Four were derived. Interview data, observation and background documentation were utilized as sources of evidence. For each of seven factor categories is a summary table is provided below, followed by a discussion of each individual success factor.

1. Human Resources and Human Resource Development

Table 7.1 Human resources and human resource development

Factors from the literature	Important	Present
1. Clear and appropriate leadership	Y	T

2. Availability of education, training programs/ T T

   learning opportunities

3. Labour force readiness/availability (skill, specialization, Y N/T

   flexibility, age, health, education, participation)

4. Management, marketing, technical/professional skills Y N/T
5. Entrepreneurial spirit Y T
6. Active citizens/volunteers Y T
7. Willingness to change Y T

OVERALL Y T

Symbols: Y-Yes (very important, present according to all measures/indicators), Y/T (fairly important, present according to most indicators), T (somewhat important, present according to some indicators), N/T (not very important, not present according to most indicators), N (not important, all indicators demonstrate factor not present).

1.1 Leadership

The majority of interview respondents felt that leadership in the community of Alert Bay is medium to strong. A core of dedicated individuals who recognize the need for change lead the community's CED efforts. "Several key stakeholders and committed community members have recognized this time of change as an opportunity to identify, diversify and refocus the economic potential for our community" (ABEDC, 1996; 1).

The question of "who are the leaders" is relatively clear. Most of the 11 organizations involved in CED, for example, have elected Boards of Directors or Councils who play an essential role. In some cases, organizational staff play an equally active role in decision making with respect to CED than their Councils/Boards. Finally, some community members have chosen not to participate in these organizations at the Board or Council level but are active volunteers who represent and serve the community in other important ways (e.g. at the CCLRMP table, meetings with government etc.). For the most part these individuals are also known and recognized for their leadership role in the community, although in a less formal way.

Dependency on a limited number of individuals to lead CED efforts, hoever, is a notable concern. Leadership development and succession planning, for CED officers for example, is required. Leadership training has not been a high priority, nor have young people generally been involved in decision-making bodies or brought into positions of leadership through mentorship programs. U'Mista Cultural Centre, and to a lesser extent MTTC and KTFC, have promoted youth and leadership development to some degree. The 'Namgis have also hired youth in leadership roles in cultural development and have offered Band management training programs. Given an identified need for more human resources to take on CED-related tasks, as well as the recurring theme of "troubled youth", it would appear that more of this type of activity is required.

The position of "Community Leader" is never an easy one to fill. In Alert Bay this has certainly been demonstrated to be the case. Community members who are willing to take on a leadership role in the area of CED and resource management risk becoming the subject of personal and political attacks. Further, they may not be provided with adequate support from the community and other leaders:

Sometimes you hire real good people and you hurt them (N2).

> I feel like I'm being hung out to dry, I'm up there operating in isolation. I'm thinking of all these things and putting them to paper and developing all these things... *** says carry on and do what you're doing because you're good at it. Well there goes community economic development ... There's no one coming in and saying I think as a community we should do this... just to get them to prioritize 30 different proposals. I ended up connecting with one of them and said could you please do this, I have a meeting, you should know what your priorities are as a Board member (T4).

Thus, leadership (current and potential) has not been adequately nurtured.

External factors have also played a role in discouraging community leadership:

> Strong leadership - I think we have a waning leadership, especially as far as fisheries go. Because it's an uphill battle with the federal government ... bang your head against the wall so many times and they sit down and turn their chairs the other way (T3).

The Village's 1990 Economic Development Strategy argued that the business community should take a more active leadership role in economic development. However, some respondents felt that successful business people, particularly in the First Nations community, were already filling an important "leadership by example" role. Further, many local business owners are very active in CED organizations and community affairs.

It is difficult to determine whether the current community leadership in Alert Bay is the "appropriate" style of leadership to meet community needs. The question "What type of leadership is needed in our community?" is not one that has been openly discussed. The qualities of persistence and hard work, however, were mentioned by respondents as factors in successful leadership - both of which appear to be present in the community. Some respondents argued that information should be more readily available and decision-making more transparent (a more open style of leadership than the status quo). Others, on the other hand, felt that it was important to "let the leaders lead" (See Appendix 6 -Public Participation). One respondent argued that the community problem of drug and alcohol abuse extends to some of the community's leadership, and therefore that these "role models" are exacerbating rather than helping to address the problem of substance abuse.

Another concern raised was that First Nations leaders are overwhelmed with treaty negotiations, the First Nations Summit and other matters that take them away from their community and local efforts. A further, and perhaps related, issue is the apparent lack of commitment from the leadership of some organizations to a process of local CED planning, implementation and monitoring (see Chapter Four - CED Process Steps).

Finally, while several community leaders (e.g. Chief Councilor Cranmer and Mayor Popovich) have promoted increased cooperation among segments of the community (particularly First Nations and non-First Nations elements) and some progress has been made on this front, no one individual, or group of individuals, has served as a strong uniting force. Again, this may be an issue of leadership style. Given the complexity of the issues involved and long history of the underlying conflict perhaps a cautious approach to cooperation and change is deemed most appropriate? Nonetheless progress in these areas is required if leadership capabilities are to be sustained, enhanced, and CED efforts to proceed successfully.

1.2. Education and Training Programs

A number of training and education programs are available to Alert Bay residents. There are two primary schools on the Island. The independent, 'Namgis-operated T'lisalagi'lakw School originally opened in 1975. In 1996 a new, award winning school facility was built. Along with other academic subjects, Kwakwaka'wakw language and traditions are taught. Non-Native children can, and do, also attend. The School has expanded up to Grade 10.

Perhaps the most significant problem with the availability of education is the lack of a high school in the community, which is thought to have contributed to high dropout rates (see below). Students must travel to Port McNeill by ferry to attend high school. Further, Harvey (1991) suggests that, while they may be improving, secondary schools in the region have not done an adequate job of providing work experience, career preparation and entrepreneurial training.

North Island College offers basic education and training through an Alert Bay campus. The College works with local organizations and

governments (e.g. First Nations) to develop appropriate programming. Currently, for example, a coastal tourism course is being designed in conjunction with the MTTC and North Vancouver Island Aboriginal Management Society. North Island Skills Centre offers additional training options. However, many specialized education and training programs are not considered viable to operate in the area and, therefore, require residents to leave the community (e.g. construction certification, see Vodden, 1999b - Housing). Obtaining a university education must also be achieved either by leaving the community or through distance education. This may be an important factor in the low rate of university level qualifications in the community (see below).

1.3. Labour Force Readiness/Availability

A ready and available labour force can facilitate CED projects, particularly those that are oriented toward job creation. Indicators of labour force readiness include: skills, specialization, flexibility, age, education, and labour force participation rates. If the necessary skills and knowledge are not present in the community, for example, training programs and outside hiring will be necessary, particularly in a project's early years. For retraining to be successful, however, the available labour force must be flexible enough to adapt (e.g. transferable skills, willingness to learn and change occupations). Lack of skills and education was identified as a significant barrier to CED success in Alert Bay. Alert Bay residents have a lower level of formal education than elsewhere in the province. Of Alert Bay residents 15 years of age and older in 1996 43% did not have a secondary school diploma (vs. 31% in BC). On the 'Namgis reserve this figure increases to 59%, while 30% of Village residents are without their Grade 12. According to one representative of North Island Secondary School very few students from Alert Bay, particularly of First Nations ancestry, are completing high school even today but "it's improving". "We need to make school more meaningful for First Nations students." The need for role models and for families to place a priority on education was expressed.

At 69% labour force participation rates are higher in Alert Bay than in the remainder of BC (66%), although lower than the rest of the region (78%). Unemployment is also higher. Although high rates of labour force participation and unemployment indicate a sizable and willing workforce, several problems with the labour force were referred to as barriers to employment initiatives.

A number of respondents referred to a lack of reliability and limited willingness to work on a consistent basis (e.g. 9 to 5, 5 days per week):

> Do we have 40 people who actually want to work 9 to 5, 50 weeks a year? … We're finding out that's not true … they try, the local government really try to make the outside contractors hire local labourers, and the outside people have a problem with the labourers because they show up one day and not the next (V2).

The problem is attributed in part to a lack of experience working in an employment situation quite different from life on a fishing boat. "Fishing fever" is also a factor:

> We went through 120 people before we got a whole crew ... we didn't take our jobs seriously. I hadn't had an opportunity to be involved in a real job. And then to have the attitude that you're working from this time to that time - it was hard (T4).

> Two young fellows came in to, three actually, to work with the carpenters two years ago. And last year there was big talk about this million dollar fishery that's going to happen. "People are going to be so filthy rich", "It's going to be the biggest sockeye run in the history of the world!". What happened? They all dropped out and went fishing and never made a penny. (T4)

Finally, health problems, particularly substance abuse, are also seen to play a negative role in workforce reliability. See page 262 for further information on health issues.

Age of the labour force was not referred to as a particular concern. Statistics show a labour force that is only slightly older in Alert Bay than elsewhere in the province (44% of the working age population 25-44 vs. 48% in BC and 50% in Mount Waddington). With 21% of the labour force under the age of 25 and 25% of the population under the age of 15, concerns expressed about the community's youth indicate that there are insufficient jobs for young people rather than a shortage of young workers (Statistics Canada, 1996).

Some community members stated that racism is a factor. New programs such as an evening study centre in Alert Bay and cultural programs and classes at the high school have been brought into effect to attempt to address the issue of secondary school graduation rates.

While 47% of Alert Bay residents had attended university or other post-secondary education facilities (13% university and 34% other) in 1996, in BC the figure was 56%. The key difference in the level of post-secondary education in Alert Bay and elsewhere in the province

is the lack of university-educated residents. While 27% of Alert Bay residents have received certificates or degrees from a non-university post-secondary institution, a percentage equivalent to provincial levels, only 8% of Alert Bay residents had obtained a university degree, compared to 16% of the provincial population (Statistics Canada, 1996). There are a greater number of females than males with post-secondary qualifications in both the Village and on reserve.

Some respondents claimed there is little interest in the community in seeking higher education. "Well, that's the biggest problem we have in the communities, you know, everybody's dependent on the government, and they really don't go out seeking higher education" (N4). However, course enrollments and interviews suggest that more and more residents are willing to seek education and retrain themselves for new occupations (flexibility - see also 1.7 below).

No formal skills inventory has been conducted for Cormorant Island. However, it is recognized by those that have worked with and studied the community that the Island is rich is certain types of skills and poor in others. For example, Alert Bay is well known for its skilled fishermen and skippers, representing a labour force specialization in fish harvesting and vessel operation. Other skills and subjects of knowledge required of fishermen range from fisheries biology to mechanical engineering: "A fisherman is a jack of all trades - part mechanic, carpenter, biologist, weatherman .." (Gislason et al., 1996; Appendix G/H). Many of these skills are transferable to other industries.

Artistic skills, particularly of First Nations carvers and painters from Alert Bay, are renowned around the world. The community is also home to trades people, a growing number of entrepreneurs and people trained in human services. Among Alert Bay residents with post-secondary qualifications "Engineering & applied sciences, technology & trades" is the most common field of study for males and overall (100 qualified individuals live in Alert Bay). A total of 60 people have studied "Social sciences and related fields" (the second most common field of study, along with management and commerce), 50 have studied "Health professions, sciences and technologies", and another 35 "Educational, recreational and counseling services" (Statistics Canada, 1996).

Other skills required for sectors considered to have significant potential, such as forestry and tourism, are considered to be lacking. Morford (1998b) refers, for example, to the lack of experience in the forest sector (e.g. sawmilling, business, technical expertise in watershed assessment and restoration) as a barrier to development at this point. Further training is required. The need for training in the tourism industry has also been identified. Programs of this kind are now being offered in the community. According to several respondents, skills and certification are still required in home construction and related trades as well. Several training programs have been offered in this field but most have not been considered successful.

1.4 Management, Marketing, Technical/Professional Skills

Respondents identified business planning, proposal writing, marketing and computer skills (e.g. Internet use and web site design) as skills that are particularly important yet lacking in their community:

> I do have one brother who's trying to build himself a little business, but he doesn't have the education or management skills. He's been a fisherman since he was a little boy...There was an opportunity for him to get the education but it wasn't important to him. It wasn't important to 200 people in this community and that's why we're soft in the human resources and management skills department (T3).

> We didn't perform adequate training before we got into the shipyard business ... somebody should have been walked along side the head person, every one of those businesses, external people, they should have taken someone job shadowing (T2).

A review of education statistics, however, demonstrates that "Commerce, management and business administration" is the second most common field of study for Alert Bay residents with a post-secondary education. In total, 60 residents have had business or management training. Training in the use of the Internet is underway and there are a few individuals, mentioned in the interview responses, skilled in proposal writing - as evidenced by the level of outside grant funding received by the community.

Another skill that is lacking on Cormorant Island is financial management, contributing to; a) the failure of some CED projects and; b) the lack of available financial capital from local sources (see below) despite years of high incomes and, of late, license buy-back payments:

> When we bought that shipyard there was 20 boats there...But one guy didn't like the Band and he was a pretty powerful guy so he took all his boats, and we didn't do that well. Not as well as we figured. So we started taking money out of our

> account to keep it going ... then we really got in a bad jam. So we had to turn around and do a plan where we pay it back over a long period of time (N3).
>
> I have people in my own family that have sold out and have found all of this money. And I keep saying, you guys better be careful. No one is going to give you that much money again in your lifetime. When that's gone you're still not going to have a fishing job, still don't have a boat (T3).
>
> ... my dad's made millions of dollars on this industry... he'd get that check a month before the herring and he'd spend it all by the next time he'd get that money. So he'd never save money. My dad is broke now. I make about 10 to 15,000 dollars in salmon and I make about 6 to 10,000 dollars in herring. I just pay my Visa out at salmon time, use it up to the limit 'til I get the herring and get myself out of the hole and just let my self get back in. That's the life of a fisherman, and that's not a business mind at all. Every person in this community is like that except for a handful and it's hard for me to change (N5).
>
> ... they don't know enough to invest it properly... it's the old fisherman mentality, easy come, easy go... (T3)

Finally, there are a limited number of experienced CED practitioners on the Island, with one EDO in particular playing a key role since the 1970s.

1.5 Entrepreneurial Spirit

While many Alert Bay residents have not attempted to run their own business and years of dependency on government and BC Packers Corp. have taken their toll on community initiative, there are many others in the community who have either started successful businesses or have innovative business ideas. From 1985 to 1995 the proportion of the Alert Bay population 15 years of age and older that was self-employed rose from 4% to 10%, how equivalent to the proportion of self-employed residents in the rest of BC . In the Mount Waddington region 9% are self-employed (Statistics Canada, 1996). It appears that the potential for further entrepreneurial development exists (e.g. many people are talking about their business ideas). However, assistance programs for new business people could be improved (see Chapter Four and Vodden, 1999b - Encouraging Entrepreneurship).

1.6 Active Citizens/Volunteers

> It's the same faces at all the meetings. How do we bring more people on board?
>
> - participant at tourism discussion group

Alert Bay has an active civil society. Service clubs including the Lions and Lioness Clubs, two Ladies Auxiliary groups and a Royal Canadian Legion branch, raise money each year for projects such as a children's playground and boat ramp. They also help host community events such as SeaFest and June Sports. There are several First Nations organizations involved in cultural development, treaty issues, health and other aspects of community life. Cormorant Recreation Association and Alert Bay Recreation Association help facilitate involvement in sports activities. Citizens participate in land use and resource management planning processes, volunteer for community services (e.g. volunteer firemen) and generally help one another. Individuals and groups undertake fundraising efforts for both individual (e.g. people with illnesses in need of $ to support health care costs) and community causes. Attendance at community meetings relating to CED has been fairly high at 40-60 residents and the 11 organizations identified in this study all have a significant volunteer component. Still, the need for more volunteers and more public involvement has been noted. A small core of individuals is responsible for much of the CED activity that takes place.

Some residents feel that voluntarism and, as a result, community self-reliance has decreased over the past decades. For example, when the community hall was built in the 1940s many community members pitched in with volunteer labour, equipment and materials. Members

of the community bought shares to finance its construction. Children used to raise money to buy their own uniforms. "There were no grants then," laments one community elder. Scout leader Chuck Wong, however, describes how kids still raise money to fund their own activities.

Although concern was expressed by several interview respondents about declines in community spirit and the amount that people help one another in the community, it was also felt that public interest and involvement in community affairs was increasing. People are concerned about the future of the community and demanding accountability from their leadership:

> There is a big network of us people, who I know are coming, which makes a big, big difference on impact in this community. More people are at meetings, more people are showing interest in different things. More people are asking questions. You know people are taking more responsibility now (N5).

A recent study of social capital on the North Island demonstrates that volunteer activity in the areas of CED and resource management has increased in the region, while traditional service club and "non-survival" types of organizations and activities have decreased due to poor economic times (Mitchell et al., 1999). Evidence suggests that this may also be the case in Alert Bay.

1.7 Willingness to Change- Attitude & Adaptability

> We must always remember that there are only two ways for a community to move. It's either forward or backward! It cannot stand still (Popovich, 1999).

Ronald (1990; 8-9) describes three groups of people in Alert Bay:

1. those with a "built-in reluctance to change" and hopes that "we can keep things this way";
2. those that accept the inevitability of further decline; and
3. an "apparently smaller group" that is eager to revitalize the community.

"A substantial portion of Cormorant Island residents", he argues, belong to Group 1. Indeed there are still those who are waiting for things to return to "normal". Government assistance programs, in some cases, have exacerbated this situation:

> Two years, I don't think that the reality has really set in for a lot of fishermen. They realize that they don't go fishing anymore ... but they've all of a sudden got this Fisheries Renewal program that they think is sustaining them, but they haven't realized that that's going to stop suddenly, whether it be two years or three years, and they're going to be sitting there wondering what the heck went on. That's when the crisis is going to come (T3).

However, since the events of the mid 1990s a significant number of people have moved into category 3:

> There is a growing awareness to the fact that we're always depending on handouts and eventually it will end and we're going to have to do things for ourselves. I would say that the bulk of the community is still in the old mode and the people who have a vision for the future are definitely a minority ... but the other people one by one are discovering for themselves that there's another way (R3).

When asked if the economic crisis had caused community members to feel that there is a need for change (Q. 9.11) most respondents replied "yes". Acceptance of tourism as a new economic generator, for example, rose dramatically from 1996 to 1998 (the study period). Leaders have encouraged this shift. Progress has been slow, however. Job losses in 1996 were dramatic, yet two years later the need for change was only beginning to have widespread acceptance.

> ... it is going to be really slow. Not everybody is going to jump on it, cause of the old school stuff, but some people will...

> There is going to be people like me, and different other people, who will continue to grow, but that's a personal thing too. A lot of people are just going to want things for nothing. Other people are going to want to invest in the whole (N5).

Although there has clearly been resistance to change, and the loss of what has been considered a "good life", evidence also suggests that there is an underlying level of adaptiveness in the community and the local labour force. Over time, for example, Alert Bay families have taken on multiple occupations and sources of livelihood to meet their needs. Most respondents felt that experiences of the past demonstrate that the community of Alert Bay has an ability to adapt. Others noted, however, that the community had never before been faced with changes as dramatic as those they are faced with today. One respondent suggested that the community's greatest strength has "willingness to look at our options, and I would say the stubbornness to survive" (T2).

2. Economic and Enterprise Capacity

Table 7.2 Economic and enterprise capacity

Factors from the literature Important Present

1. Business success rates/economic health ? N/T
2. Economic diversity (sectors, employers) ? N/T
3. Local ownership Y T
4. Local supply and demand networks ? N/T
5. Existence of outside trade networks/access to markets Y N
6. Base of informal (non-cash) economic activity Y Y
7. Identified economic diversification opportunities Y Y

OVERALL Y N/T

Symbols: Y-Yes (very important, present according to all measures/indicators), Y/T (fairly important, present according to most indicators), T (somewhat important, present according to some indicators), N/T (not very important, not present according to most indicators), N (not important, all indicators demonstrate factor not present).

2.1. Business Success Rates/Economic Health

Although the number of official bankruptcies in Alert Bay has been relatively low, Village of Alert Bay business licenses fell from 71 in 1996 to 58 in 1998 (Vodden, 1999). Many of those that disappeared were new businesses that were not successful. However, anecdotal evidence suggests that longstanding businesses are also suffering, their revenues down substantially from the beginning to the end of the study period (throughout the late 1990's). The Village's three grocery stores are reported to be under strain, for example. Incomes are declining, unemployment rates rising. Economic health, in summary, is poor. Although the salmon fishery has experienced significant declines in recent years a large, competent, well equipped and regarded commercial fishing fleet remains in Alert Bay (strength/specialization).

2.2 Economic Diversity

According to local estimates and DFO records (Census data provides lower figures) more than one-third of employed Alert Bay residents work in occupations related to the fishery. Of private sector employment the fishery's importance rises to 54%. Alert Bay remains, therefore, a fishing dependent community. In fact, from 1986 to 1996 primary employment became more important in the municipality (although less important on reserve). The 'Namgis First Nation is the community's largest single employer. Combined with a high level of dependence on the government sector for employment (37.5%) and income assistance (over 20% of earnings in 1995 and rising), economic diversity is low in Alert Bay at this point in time. Initiatives are underway, however, in different sectors to attempt to diversify the local economy and new jobs have been created in sectors such as tourism, resource management, silviculture, watershed restoration, and, to a limited extent, aquaculture. Arts also make up an increasing portion of local incomes and fishermen have begun to diversify within the fishery (see section 5.3.2 above).

2.3 Local Ownership

Most of the homes and businesses within the community are locally owned. Natural resources in the area, however, are not. Most forest and marine resources are "owned" by senior levels of government. The question of land and resource ownership is, however, the subject of ongoing treaty negotiations. Participation in the treaty process is one way local organizations are attempting to increase local ownership in the medium to long term. Community allocations of fishing licenses have also been called for and, in fact, received by the KTFC. For the most part, however, local resources remain controlled by governments and externally controlled firms to whom those governments have granted rights of resource access.

2.4 Local Supply and Demand Networks

There are few local supply and demand networks. Many items purchased by local companies (e.g. retail suppliers, restaurants) cannot be purchased locally at wholesale prices/volumes. The exception to this is seafood products, supplied to restaurants by local fishermen, and services purchased by local businesses from tradespeople. A new net cleaning business to service the aquaculture industry is an example of a further attempt at integration. There have been few attempts to add value to resources, thus moving down the production chain and creating local markets for harvesters. The exceptions include First Nations carving and several unsuccessful attempts at seafood processing operations. New projects in value-added fish and forest products are underway, however.

2.5 Existence of Outside Trade Networks/Access to Markets

We need help to develop the markets we need for our economic well-being.

(Cranmer, 1998; 7)

Accustomed to selling fish to local buyers and products and services to a market consisting of local residents and visitors, Alert Bay does not have a great deal of experience with marketing to the outside world. Recent efforts have been made to market both tourism and First Nations art in North America and internationally. Outside trade networks, therefore, are limited but growing.

2.6 Base of Informal (Non-cash) Economic Activity

As discussed in Appendix 6 the informal economy, while threatened, remains very active in Alert Bay and is essential to quality of life in the community. See Vodden (1999) for a detailed discussion on the health and importance of the informal economy on Cormorant Island.

2.7 Identified Economic Diversification Opportunities

Numerous opportunities for economic diversification have been identified, as discussed in Chapter Four.

3. **Financial Capacity**

Table 7.3 Financial capacity

Factors from the literature Important Present

1. Ability to obtain, grant funding from external sources Y Y
2. Ability to access outside capital/credit (loans, investment) Y N/T
3. Ability to generate capital locally Y N/T

OVERALL Y N/T

Symbols: Y-Yes (very important, present according to all measures/indicators), Y/T (fairly important, present according to most issues indicators), T (somewhat important, present according to some indicators), N/T (not very important, not present according to most indicators), N (not important, all indicators demonstrate factor not present).

3.1 Ability to Obtain Grant Funding from External Sources

> It is clear that grants and allowances from other levels of government have historically provided the bulk of the improvements in the infrastructure of the community (Ronald and Associates, 1990; 8).

Alert Bay organizations and governments have been extremely successfully at obtaining grant funding from governments, and to some extent foundations and other external funding agencies. First Nations organizations obtain funding annually for economic development from the Department of Indian Affairs and from the Department of Fisheries and Oceans for fisheries activities. In recent years the Village of Alert Bay has received several grants for economic development projects from agencies such as Forest Renewal BC and Human Resources Development Canada. Societies such as U'Mista Cultural Centre and Inner Coast Natural Resource Centre operate primarily with grant funding raised from outside the community, although attempts are made to raise funds locally and offer revenue-generating services.

In fact, dependency on grants has been identified as a community weakness (e.g. Ronald and Associates, 1990). This is because, first, in the long-term projects reliant on grant funding may not be sustainable (e.g. funding is likely to run out at some point) and, second, grants are more easily received for new projects than for ongoing planning or operations. "Funding is not a major barrier on initiatives but there is no funding for EDOs or forestry development for each Band" (Morford, 1996). T2 adds "... once the government money fell apart it was over" (re. the aquaculture project).

3.2 Ability to Access Outside Capital/Credit (loans, investment)

Inability to raise private capital is seen as a barrier to success with respect to tourism development, for example. Interview responses suggested that the Village of Alert Bay has had little success with attracting private investment from outside of the community. As discussed above, instead, senior governments have provided the majority of funding for development activities. It is felt by the Village that a significant input of senior government dollars for infrastructure upgrades will be necessary before private investment can be attracted to further develop Alert Bay's tourism industry.

The 'Namgis and other First Nations, on the other hand, have had a number of proposals from private, outside interests for joint venture projects (primarily to be located on reserve lands) in sectors ranging from aquaculture to forestry and tourism (e.g. a hotel). These offers have been viewed with caution:

> one of the problems of Indian communities is that...you cannot use your land for collateral ... I couldn't go to the credit union and mortgage my house....to start a business you're talking about 40, 50, 60 thousand dollars. A little business! You can't go to the bank...how can you guarantee that they can take back what you borrowed? So they talk about partnerships...

> joint venture...is everybody willing to let go of control and say I will loan 49% to the Indian … can you do that? Does it make sense to do that? Cause for the Indian it does, because it's his land and it's his business, but it's your money...I could see joint ventures happening if there was a buy-out plan for the Indian ... so the Indian will be allowed to buy out that partnership... (N2)

A joint logging project was undertaken in 1995/96. The partnership was considered less than successful by several respondents, however the door to exploring joint ventures as a possible method for raising outside investment has been opened. Other forestry partnerships are also underway. Financial resources are a significant challenge to local involvement in the forest sector (particularly logging). Lack of capital is a thought to be the biggest barrier for local firms wanting to bid on Small Business Timber Sale Licenses, for example (Fitzgibbon & Associates, 1995).

3.3 Ability to Generate Capital Locally

> Most guys don't have the money to do things, so somebody has to come from the outside (N3).

The tax base for the Village of Alert Bay is very modest and the available discretionary funds so small that there are few resources available for economic development by the municipality unless they can be obtained from other funding sources. Despite the common perception that there is no surplus money in the community of Alert Bay to be raised for development projects, however, opportunities for raising funds locally have been identified during this study. In fact, service clubs have been doing it for many years and have invested in projects such as parks and boat launches. "The Lions Club made $140,000 in 1996" (O3). As discussed above, many residents have earned a great deal of money over time in the fishing industry and may have funds to invest in community ventures. Others have received funds from the buy-back program that have been, or could be, invested in their own small business ventures. Further, according to a number of interview respondents, the 'Namgis First Nation have sources of funds that could be directed to CED:

> The band has a cigarette outlet, and there's lots of money just sitting there, so why is the money just sitting there, or is the band council not letting us know that the money is going somewhere else other than to the community where it's supposed to go (T4).

Many agree that a community loan fund should be created with this money:

> The band has to find a way to have a loaning institute... the other end ... they have a community future, (N2)

While there appears to be reluctance by people to invest their own funds (personal or organizational) in community development:

> I don't see the First Nations putting money into any kind of sustainable development. Be it in forestry, fisheries, or anything. What I see is, they are trying to get everything for nothing. They are not putting in their own funds. In order for something to work, you have to have to have an investment in it (T4).

> I don't think anybody's gonna put money into anything that's gonna give them a lower interest rate (N4).

the majority of respondents who commented on the viability of a community loan fund said they would consider investing in such a fund, even at a lower interest rate, and felt that others in the community would do the same.

In summary, there has not been a substantial track record indicating an ability to raise funds locally in Alert Bay (except by service clubs) although the potential, and some desire to do so, is present. Also see Appendix 6 - Economic Viability.

4. Social/Quality of Life Factors

Table 7.4 Social/quality of life factors

Factors from the literature	Important	Present
1. Sense of community identity, culture, history	Y	Y
2. Social and cultural amenities	Y	T
3. Health and well-being (current levels and related services)	Y	N/T
4. Social cohesion/collective spirit	Y	T
OVERALL	Y	T

Symbols: Y-Yes (very important, present according to all measures/indicators), Y/T (fairly important, present according to most issues indicators), T (somewhat important, present according to some indicators), N/T (not very important, not present according to most indicators), N (not important, all indicators demonstrate factor not present).

4.1. Sense of Community Identity, Culture, History

The community itself, people either love it or they hate it. And mostly they love it (N5).

Community culture, sense of history and shared identity are extremely strong in Alert Bay. Kinship and Kwakwaka'wakw culture create strong bonds among long-time residents. The culture and way of life that may be referred to as "living off the land", also expressed by the term Aweena'Kola ("living at one with the land and sea"), is also shared by those of Kwakwaka'wakw and pioneer ancestry alike. Well-attended community festivals typify this spirit, providing a reason for community members to celebrate together even when times are bad (Speck, 1987). Many friends, relatives and past residents come to town from outlying villages and elsewhere in the province for annual events such as June Sports and SeaFest. The community's rich sense of culture is considered a strength for tourism development. Public admiration for and interest in this culture has created a tourism market, and a niche for value-added products with a First Nations theme.

Some express the opinion that people should be more active in community affairs, however, turning their sense of community pride into action:

> I think one of the barriers that we have is a lack of community. The community needs to make the decision. If eight people say that's a wonderful idea, and nobody else agrees, it doesn't work. They need to come together and think about priorities and goals (N5).

Voluntarism is present only "to some degree" in the community. See 1.6 above.

4.2 Social and Cultural Amenities

A number of cultural programs exist for First Nations residents on the Island and recreational facilities include a ball diamond, bowling

facility, soccer fields, trails, floor hockey area etc.. However, there are a limited number of social and recreational opportunities, according to respondents, particularly for youth. Although there are a number of artists in the community (First Nations and non-First Nations) there are no formal programs, venues or facilities for theatre, music or other arts programs outside the schools and cultural programs offered by Kwakwaka'wakw organizations.

4.3 Health and Well-being

Health is a major issue in Alert Bay and a significant barrier to success in CED (see labour force above). Mortality rates are significantly higher in Alert Bay than elsewhere in the region. In 1997, for example, the community represented approximately 8% of the population but 27% of the region's mortalities. Lifestyle related deaths (drugs, smoking, alcohol) account for 39% of all mortalities in Alert Bay. Problems of suicide and substance abuse were referred to throughout the interviews. Low self-esteem and other problems related to impacts of the residential school system and assimilation policies were also referred to. Residents clearly see the link between healthy individuals and a healthy local economy and recognize that community health, particularly among the youth, is an issue of critical concern:

> All these things that the government has done to us that has limited us and taken away the esteem. That you have to build in people first. You have to address those people, like myself who has had his esteem ripped apart, culture taken away, and language taken away and so forth. They have to address the residential school thing ... Once that is done, you're going to see a change in people ... people have to have the esteem first before they challenge these economic ventures (T1).

> the community needs healing...and it's not right for me to really say that forcefully. Because I quit drinking doesn't mean the world has to stop. But I know this; our leaders have to heal. And they have to understand that drinking was the downfall of the Indian person... I think until my people wake up and see they're hurtin' themselves with all the drinking they're doing we're never going to get ahead (N2).

> From what I see...children in our community are lost. You know, parents doing drugs and drinking and alcohol...it's a really tough thing to watch in our communities, ...we have our own treatment center right now, so that really helps (N4).

> In order for us to get beyond today or the next day we need to get healthy and we need to continue to work on ourselves... There's nothing here for youth. Our youth are dying, on a daily basis. They're hanging themselves, they're taking drugs. and they're extremely upfront. They want some kind of help. They're asking for help somehow, but how do they get it? (T4)

Health services in Alert Bay, on the other hand, are considered to be excellent. The 'Namgis First Nation operates a community health centre, which offers a range of services including a Safe House for women and children at risk, an infant health program and drug and alcohol recovery center. In the Village St. Georges Hospital was first opened in 1909 but was rebuilt in 1925 after a fire. St. Georges hospital is scheduled to be replaced with a new multi-million dollar facility on the 'Namgis reserve in the near future. See Vodden (1999 and 1999b) for more on health programs now available in Alert Bay and improvements in the state of resident health in Alert Bay since the 1980s.

4.4 Social Cohesion/Collective Spirit

The presence of social cohesion is mixed on Cormorant Island. The community tends to stand united against the forces that impact them from the outside world. In their day to day lives (on the street) residents generally appear to get along well. Speck (1987;65) describes the social interaction between residents from "both ends of the Island", for example (see page 16). One respondent cited "ability to communicate with each other and work together" as a community strength.

Residents and community leaders are particularly proud of the extent to which people go out of their way to help one another in the community, particularly when their friends and neighbours experience difficult times:

> The selection committee (ed: for Citizen of the Year award) felt that all the residents of Cormorant Island should receive honourable mention for getting together the way that they have in 1998 to help our friends and neighbours in need. 1998 saw the Big House fundraising event, the Victor Hanuse fund and the Alfie & Tammy Alfred House raising fund. In all of these events the community came together with monetary and item donations of all kinds.

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*** s house burned down. Shoprite arranged for baskets of donations and people gave up their spot in the housing waiting list.

Despite hard economic times, when the Kwakwaka'wakw Big House was burnt down by an arson individuals, local small businesses and large industries in the area all contributed to the rebuilding effort.

Geographic isolation has contributed to a sense of interdependence among those who live on Cormorant Island. Long-time, extended families also contribute to this sense of connection to each other and to place. In the First Nations community life has revolved around extended families or kinship groups since early times. This connection extends to nearby communities. A commitment to the land base and natural resources of the area also ties the community together with a sense of common identity and of connectedness with the surrounding environment, based on decades, even centuries, of living in the midst of a relatively pristine and unpopulated ecosystem.

However, there is a division in the community along racial lines, demonstrated by the example of the 1979/1980 health care crisis. This underlying tension is tied to the still-recent effects of European settlement and government assimilation policies, as well as racism among some residents (both Native and non-Native). Community cohesiveness is weakened by this tension:

Yeah we don't trust each other (N2).

To get everybody on the same wavelength -- that's the biggest mountain. It's hard (R2).

Conflict tends to take place at the political and organizational, rather than individual level.

5. Organizational Capacity

5.1 Range of Community-Based Organizations and Institutions

Although there are a number of community organizations in Alert Bay and residents sit on numerous regional organizations as well, existing community organizations do not cover the full spectrum of community issues. For example, there is no artist's organization, environmental/ conservation group, or business association. Although the community is small and volunteer resources limited this may leave room for further development in Alert Bay’s non-government sector (see Table 7.5). Additional organizational capacity may also be needed in the forest sector. Morford (1998b) conducted a SWOT analysis of MTTC/KDC opportunities in forestry and identified "limited institutional capacity" as a barrier to development in the forest sector.

Table 7.5 Organizational Capacity

Factors from the literature	Important	Present
Range of community-based organizations and institutions	?	T
Health/effectiveness of local organizations and institutions	Y	T
Broad-based community participation	Y/T	T

Willingness/ability to sustain long-term development efforts Y Y/T

Willingness/ability to collaborate Y Y/T

Experience/willingness to use strategic planning & evaluation Y T

OVERALL Y T

Symbols: Y-Yes (very important, present according to all measures/indicators), Y/T (fairly important, present according to most issues indicators), T (somewhat important, present according to some indicators), N/T (not very important, not present according to most indicators), N (not important, all indicators demonstrate factor not present).

5.2 Health/Effectiveness of Local Organizations and Institutions

Financial viability is a concern for several organizations, along with human resource limitations (e.g. staff turnover linked to instability of funding, limited of volunteer energy). See also Appendix 6, pages 232-33 (Economic Viability). Plans for leadership succession could also be improved. Communications appears to be a particular challenge for organizations, particularly those representing multiple communities, organizations or First Nations:

> ... they (KTFC) are trying to work hard at doing sustainable development ... however, there is some kind of bridge, there's a communication gap. They're not reaching all of the people, in terms of what they want to do (T4).

I think us council members have to bring more and more stuff back to the people (N5).

Despite organizational health issues, however, organizations tend to be successful at moving towards many of their objectives, and are therefore relatively effective. Mitchell et al. (1999) examine the effectiveness of ICNRC and NIFC, for example, with positive results. 'Namgis First Nation has made significant progress in the areas of health and education. Economic development efforts, however, have had less success.

5.3 Broad-based Community Participation

Compliance with the principle of "Broad-based Public Participation" among Cormorant Island organizations is considered to be present "to some degree". See Appendix 6, page 220-223 for more information.

5.4 Willingness/Ability to Sustain Long-term Development Efforts

As discussed in Appendix 6 (Long Term Planning and Action, page 225-7), Alert Bay organizations generally take a long term approach to development. The Nimpkish Integrated Development Approach, treaty negotiation process and interview results all provide excellent examples. Some concern has been raised about whether this long-term approach to community planning extends to programs meant to assist individuals, however. These programs are generally seen to be short term, "make work" exercises.

5.5 Willingness/Ability to Collaborate

See Appendix 6, pages 229-33 (Cooperation/Collaboration).

5.6 Experience/Willingness to Use Strategic Planning & Evaluation

Weaknesses in organizational capacity with respect to planning, monitoring and evaluation are discussed at length in Chapters Four and Five, as well as Appendix 6 (Long Term Planning and Action). Despite the absence of a strategic planning process at this time for organizations such as the Village of Alert Bay, 'Namgis First Nation and the community as whole, some prior experience with strategic planning does exist in the community, as exemplified by the Nimpkish Integrated Development Approach (NIDA). Furthermore, organizations such as U'Mista Cultural Centre and Kwakiutl Territorial Fisheries Commission have engaged in strategic planning processes.

6. Ecological Resources

Table 7.6 Ecological resources

Factors from the literature Important Present

1. Environmental health Y T
2. Protected areas Y T
3. Productive natural resources Y Y/T
4. Unique natural features Y Y
5. Stewardship ethic Y Y/T

OVERALL Y Y/T

Symbols: Y-Yes (very important, present according to all measures/indicators), Y/T (fairly important, present according to most issues indicators), T (somewhat important, present according to some indicators), N/T (not very important, not present according to most indicators), N (not important, all indicators demonstrate factor not present).

6.1. Environmental Health

The ecosystem surrounding Cormorant Island is rich in resources and still relatively pristine compared to other more populated areas of the province. However, many resources are threatened and species endangered. One indicator of sustainable land use and environmental health is biodiversity. Communities, industries and land use practices are not sustainable if they result in the extirpation of other non-human species. The North Island region is home to a vast array of birds, mammals, amphibians, reptiles and plant life. However, many species in the area are under threat.

According to the B.C. Conservation Data Centre there are 13 red listed vertebrates and one red listed plant within the Port McNeill Forest District. The region does have a lower concentration of species at risk than many others in the province (only 14 of 302 red-listed species in BC are present).

While few red and blue-listed species have been documented on Cormorant Island itself, many do exist within the larger area upon which residents of the community depend for their livelihood and, therefore, can play a stewardship role. For example, listed species, such as the Roosevelt elk, Queen Charlotte goshawk, and marbled murrelet, are present within the Nimpkish Valley, traditional territory of the ‘Namgis First Nation.

Plant diversity in forest stands has been reduced as tree planting for commercial purposes has altered naturally occurring forest structures. Planting in the Nimpkish watershed began in the 1950s. Hemlock was recolonizing harvested lands. Until the 1980s planting focused on ensuring replacement by second growth stands of the more valuable Douglas fir. Planting in the late 1980s switched to focusing on amabilis fir on wetter sites (Weinstein, 1991). Lower value and "nuisance" species such as salmon-berry, spruce and alder have been removed from Nimpkish forests through silviculture techniques, thus reducing plant biodiversity and endangering whole plant communities. The Conservation Data Centre lists 48 plant communities as being "at risk". Of these 13 are red-listed (CDC, 1996).

Numerous fish stocks in the region are considered to be depressed. Nimpkish sockeye populations have fallen from historical numbers of 750,000-1,000,000 fish returning annually to an average of 37,666 fish annually from 1995-1997 (Berry, 1998; Alfred, 1998). The causes for Nimpkish sockeye declines are unknown. Habitat damage and ocean conditions are considered to be significant factors. "Local spawning stocks of chum are depressed throughout the greater Kwakiutl area" (Weinstein and Morrell, 1994; 51). Chum runs in the Nimpkish are, however, doing relatively well. Coho and chinook stocks in the Nimpkish have, however, dropped to only remnants of historic numbers and are seriously endangered. Increasing sport fishing pressure, along with habitat damage, are cited as major causes. The most significant numbers of Pacific salmon returning to North Island river systems are pink salmon runs. The largest escapements occur in mainland streams (Fitzgibbon & Associates, 1995). Pink runs, hoever have also been depressed.

A 1993 survey of Kwakwaka'wakw fish harvesters revealed additional concerns about the status of local fish stocks (Weinstein and Morell, 1994). Halibut stocks are reported to be "scarcer in local waters than they used to be". Competing harvesters, particularly recreational fishermen are blamed. Lingcod, red snapper (Yellow-Eyed Rockfish) and other bottom fish such as greenling, black, copper and yellow-tailed rockfish are considered "seriously depleted". Average size has dropped from 30-60 pounds to 10-20 pounds in recent years. Sport and live tank fisheries are thought to be major contributors.

Herring stocks crashed in the mid-1960s due to a large industrial fishery for herring. Despite a new roe herring fishery and a small roe-on-kelp harvest (two licenses for roe-on-kelp are held by Kwakwaka'wakw organizations), concerns were not expressed in a 1993 survey about current herring stock status.

Eulachon runs are severely depleted in Kingcome River, having disappeared in a number of past years. Possible causes include a log dump at the river mouth and bycatch by trawlers and herring test seiners. The Knight Inlet eulachon run, while still abundant, is also significantly reduced. Again logging impacts are thought to be responsible. Attracted by waste food, predation of young eulachon by farmed salmon in net pens may also be a factor.

According to the Weinstein and Morrell study (1994), clam stocks have been reduced by non-First Nation diggers and pollution from sewage and industrial effluent. Similar problems have made it harder to find crabs in Kwakwaka'wakw waters. Sea urchin and abalone stocks have been severely depleted, also as a result of overfishing by commercial and recreational divers. Despite closures illegal abalone harvests continue. Dive fisheries in the area began in the 1970s and intensified in the 1980s, resulting in a series of local extirpations.

Drinking water quality on the Island is excellent. Much less is known, however, about water quality in the surrounding marine ecosystems. Pollution sources into the waters of the bay around which the town is located include sewage, gas and oils from boats, road runoff, and a marine fuel facility. Some litter is also thrown on the beach, although this appears relatively infrequent and is considerable improved since historic times. Sewage is a notable environmental concern. There are numerous discharges of untreated sewage from the Village to the foreshore of the bay. The impacts of effluent on the species, marine and shoreline habitats of the district surrounding the Village are largely unmeasured. Representatives of BC Ministry of Environment Lands and Parks (MoELP) have expressed concern for over a decade, stating that sewage effluent discharge "could constitute a potential health and environmental hazard". High capital costs and uncertainty about future population levels have prevented the construction of a sewage treatment plant since 1986. In 1997 MoELP demanded that direct outfall of septic tank effluent be discontinued.

A potential water quality concern identified with respect to the water table and waterways of the Nimpkish Valley is the intensive application of herbicides for forestry purposes that occurred in the 1980s. An estimated 1,930 hectares of land were treated during the decade, sometimes with applications as large as 936 kg per year (1984) (Weinstein, 1991). Information on impact of these herbicide applications was not available in reports reviewed.

Although little information is available on air quality in Alert Bay it is reasonable to assume that air quality is excellent. There are few sources of industrial air pollution in the community. Wood stoves and automobiles (producers of greenhouse gas) are likely to be the largest contributors but have little local effect due to winds and dispersion. This is not to ignore their contribution to the global emissions problem.

6.2. Protected Areas

As discussed above, wildlife and plant diversity has been reduced as a result of resource harvesting, resulting in difficulties obtaining resources needed to sustain the area's critical informal economy and the growing eco-tourism industry. Protected areas are considered important (along with the improvement in fisheries and forestry management practices) if the region's tremendous biodiversity is to be

maintained.

Protected areas in the ecosystem surrounding Cormorant Island (Queen Charlotte Strait ecosection/Nimpkish Valley) are numerous but do not represent 12% of area and are not considered representative of the ecosystem types. There are a number of areas in the region surrounding Alert Bay that have received some form of protected designation. On Cormorant Island itself, Gator Gardens Ecological Reserve is home to a variety of plant and bird species, as well as CMTs (Culturally Modified Trees) and walking trails. Within the Nimpkish watershed there are several other parks and protected areas. Marine parks in the nearby vicinity of Alert Bay include the Broughton Archipelago Marine Park, a 2,000 hectare Class A park, and Cormorant Channel Park (Class A, 216 hectares) in the Pearse Islands group, directly adjacent to Cormorant Island. South of Cormorant Island, on Vancouver Island, the Michael Bigg (Robson Bight) Ecological Reserve protects the world-famous Orca rubbing beaches (see below).

The Province of BC has launched two major land use planning processes in the Mount Waddington Regional District/Kwakwaka'wakw territory since 1990. These processes have impacted management of the lands and waters surrounding Cormorant Island significantly. The first was the Vancouver Island CORE (Commission on Resources and Environment). The second was the Central Coast LCRMP (Land and Coastal Resource Management Plan). Although the CCLRMP is not yet complete, both will result in increased amounts of protected areas in the region. However, less than 5% of the forested land base was not managed by the Forest Service in 1995 (including parks). Therefore, it appears that significantly less than the targeted 12% of forest ecosystems are formally protected in this region (Fitzgibbon & Associates, 1995). The Vancouver Island Land-Use Plan has been criticized for not protecting any of the North Island's "intact big tree ecosystems", arguing that the level of protection offered was not enough to preserve biodiversity. Further, only 8% of the Queen Charlotte Strait ecosection lies in existing or proposed protected areas.

6.3. Productive Natural Resources

Natural resources still present economic opportunities in the area. As discussed above, many of the fisheries resources in the region have been depleted. The primary causes appear to be both over-fishing and habitat degradation. Old growth forests have, for the most part, been liquidated and replacement forests are much less diverse than the original ones and are not likely to ever reach at stage where old-growth characteristics are present. Only an estimated 9% of the land base remains covered in mature forests. With restoration and changes in management practices/policies, however, it is believed that opportunities still exist in the traditional logging and salmon fishing industry due to high productivity of the region's forests, the health of some remaining salmon runs and plans for restoration of others. Rich fish and wildlife resources help fuel a growing tourism industry (see below).

Morford (1996b), the ICNRC and others have identified the region's non-timber forest products as resources with both market potential and significance to the traditional/subsistence economy. These include berries, salal (used for floral greenery) and plants used in traditional remedies. New fisheries potential has also been identified.

6.4 Unique Natural Features

Rich in biodiversity, significant fish and wildlife populations in the Alert Bay area draw recreational fishermen and wildlife viewing enthusiasts each year. Rivers, lakes and streams in the region support all species of salmon, as well as both resident and ocean-run trout. Estuaries and sheltered waters provide rearing grounds for salmon and over-wintering habitat for waterfowl, gulls, loons, grebes, raptors and other bird species. Populations of marine and terrestrial mammals such as whales, seals, bear (grizzly and black), Roosevelt elk and black-tailed deer can be found. According to provincial planners (CCLCRMP), for example, the Broughton Archipelago has a "very high" level of wildlife and marine mammal diversity, including: Orca, minke and humpback whales; sea lions; harbour seals; Dall's and harbour porpoises; and Pacific white-sided dolphins. Many marine-associated bird species can also be found, including: Marbled murrelets; bald eagles; rhinoceros auklets; harlequin ducks; trumpeter swans; great blue herons; gulls; cormorants; Peale's peregrine falcons; red-necked phalarlopes; and other pelagic seabirds (Fitzgibbon & Associates, 1995). High plankton production, salt marshes, eel grass beds, and kelp beds are characteristic of the area.

One marine mammal of particular significance to Alert Bay's growing tourism industry is the Orca. Studies in the late 1980s demonstrated that 130-160 killer whales are present in Johnstone Strait each summer (July-August). Over 90% of these whales use the Robson Bight rubbing beaches, which are now protected as Ecological Reserve. A whale-watching industry has arisen as a result.

Nearby Hanson Island contains over 2,000 documented culturally modified trees (CMTs), including one peeled in 1284 AD, as well as the internationally recognized OrcaLab research station. Hanson Island, some claim, is also the best location in the world to view Orca whales and contains three of the Archipelago's five oldest living cedar trees. Other features of the natural environment that support

tourism activity in Alert Bay and surrounding area include: Gwa'ni hatchery and Gator Gardens Ecological Park (nature trails on Cormorant Island). Hundreds of unique karst (limestone) formations make the region a destination for "caving" and Nimpkish Lake is known as one of the best windsurfing locations in the world. Diving in the area is also world class and good rock climbing conditions can be found. There are several protected areas in the region, preserving unique and significant natural features. The Broughton Archipelago is the top recreation priority for the entire Central Coast Land and Resource Management planning area. The area's coastline is complex, rugged and very scenic. Yet protected moorage is provided, with lots of islets, islands, coves and beaches. Finally, there is a ski hill development at Mount Cain, within 'Namgis traditional territory. In summary, the area's natural features offer considerable CED opportunities.

6.5 Stewardship Ethic

See Appendix 6, pages 211-213.

Also see Vodden (1999) re. indicators of environmental health.

7. Community Resources - Other

Table 7.7 Community resources - other

Factors from the literature	Important	Present
1. Information/communication	Y	T
2. Physical infrastructure (buildings, sewage, water etc.)	Y	T
3. Transportation infrastructure/location/routes	Y	N/T
4. Ability to adapt	Y	T/Y

OVERALL Y T

Symbols: Y-Yes (very important, present according to all measures/indicators), Y/T (fairly important, present according to most issues indicators), T (somewhat important, present according to some indicators), N/T (not very important, not present according to most indicators), N (not important, all indicators demonstrate factor not present).

7.1 Information/Communication

Access to information and communication technology is seen to be critical but lacking in Alert Bay. Some information, such as fisheries stock health, is simply not available. In other cases local organizations have not made an effort to access the information available (e.g. status of endangered species), while in still other cases factors such as lack of knowledge and poor Internet access have proven to be limiting factors. Most organizations are linked to the Internet via a regional server (Island Internet). However, users complain that the service is often busy. Telephone services are poor (e.g. voice mail, cellular access) and power failures common.

Organizations such as the ICNRC, U'Mista Cultural Centre, and T'lisalagi'lakw School are attempting to improve access to information in the community. The T'lisalagi'lakw School has established its own Internet server (via satellite). Alert Bay is home to one of only five independent libraries in BC and has over 300 members (representing close to 25% of the population). ICNRC is also establishing a library and Geographic Information System (GIS) system to compile information resources about the region.

7.2 Physical Infrastructure

Sewage treatment has been identified as an infrastructure barrier to further development in the tourism industry (see above). Unoccupied buildings and excellent water availability, however, have provided opportunities. The NIFC, ICNRC, MTTC, and KTFC, for example, are all now located in previously abandoned buildings. ICNRC, Continuing Studies and the Teen Study Centre have accessed an empty school building, remaining from the closure of the secondary school on Cormorant Island. The building is now a centre for community meetings and activities. NIFC and the Village of Alert Bay are located in what was previously an abandoned Department of Fisheries and Oceans office. Rental costs for these community organizations are, therefore, low. Access to an excellent water supply is considered a community asset and has historically been important for the fish processing sector.

7.3 Transportation Infrastructure/Location/Routes

> Transportation is the biggest barrier in my mind. Like, I can't leave tonight …. The ferry is definitely linked to us. People say it's a nice little boat ride but its not…Well this morning I was late because the ferry was late, and I couldn't get my car on and so if you could go on a bridge or a tunnel and pay a five dollar toll each way you would not have a problem…like if we decided to put a mill on the back of the island, or the fish nets and stuff like that on the back of the island, then our transportation works for us because all we have to do is take it out to the boats, access to the water is very good to us, moorage is a big problem to us (V2)

Transportation infrastructure in Alert Bay includes a breakwater and government dock for boat moorage, ferry service from Port McNeill, float plane access as well as a 2900 foot paved airstrip. Improvements to the northern portion of the Island Highway are expected to increase tourism traffic. Over 43,000 visitors travel to and/or from Port Hardy, primarily along the Island Highway, on their way to or from either the Discovery Coast or Prince Rupert ferry.

While transportation costs are considered a significant barrier to CED activities such as value-added manufacturing and retailers' ability to compete with regional centres, some suggest that the scenic ferry ride from Port McNeill to Alert Bay is itself a tourist attraction and that isolation enhances quality of life. The fact that Alert Bay is isolated and located on an Island is seen by many to be what makes the community special and unique.

Although Alert Bay, at the entrance to Johnstone Strait, Blackfish Sound, the Broughton Archipelago, Knight and Kingcome Inlets, is strategically located to service and attract marine traffic, there is limited moorage for visiting boats. Temporary moorage is available in the town centre for six to eight vessels. However, the absence of a breakwater and strong currents, as well as its size, make this moorage insufficient to support growing levels of marine tourist activity or multiple-day visits. Good anchorage is, however, available and additional moorage is available at the Alert Bay Harbour (which has a breakwater) provided space is available. Priority is given to local vessels, primarily fishing boats. There are two free boat launches on the Island.

The limited land base associated with the community's location on a small island also serves as a barrier to some potential CED strategies such as residential attraction/growth and agricultural activity. The Village and CIEDS are now looking for space for an industrial area.

7.4 Ability to Adapt

See 1.7 — "Willingness to Change/Adaptability" above. Local residents are seen to be willing to change and adapt "to some degree". While reluctant in some cases, they have proven their ability to adapt to changing circumstances in the past and are, for the most part, committed to staying in their community. It is anticipated that all other factors (human, organizational, economic, financial, ecological) will also play a role in the community's ability to respond to change. The majority of these factors are present "to some degree".

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