KNOWLEDGE MANAGEMENT IN
PLANNING COMMUNITY-BASED ECOTOURISM:
TOWARD COMMUNITY EMPOWERMENT

by

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ABSTRACT

This essay aims to inspire empirical research on the state and management of knowledge for planning community-based ecotourism (CBE). It contextualizes a problem observed in the World Wide Fund for Nature from an epistemic perspective. Literature selected from various fields is used to argue that active, systematic knowledge management — within and between remote communities — is required for effective public participation in the planning process. Discussions link knowledge, community empowerment and innovation, and suggest that communities depend heavily upon local planning agents for access to knowledge. The conclusion, therefore, is that research efforts should concentrate upon these agents.
ACKNOWLEDGEMENTS ........................................................................................................ VI

ABBREVIATIONS .............................................................................................................. VII

1. INTRODUCTION ............................................................................................................. 1

1.1. THESIS STATEMENT ................................................................................................. 2

1.2. ORGANIZATION OF THE ESSAY ............................................................................... 3

2. RATIONALE ..................................................................................................................... 4

2.1. THE FIELD INVESTIGATION ...................................................................................... 5

2.1.1. Community-based ecotourism in the Philippines .................................................... 6

2.1.2. Ecotourism In the World Wildlife Fund ................................................................. 10

2.1.3. Emerging Issues .................................................................................................... 12

2.2. THE NEED FOR RESEARCH .................................................................................... 14

Table 2.1. Major issues & theoretical research needs confronting community-based ecotourism .15

3. PLANNING COMMUNITY-BASED ECOTOURISM: THE KNOWLEDGE MANAGEMENT CONTEXT ................................................................................................. 17

3.1. TALKING ABOUT KNOWLEDGE .............................................................................. 18

3.2. THE IDEA OF KNOWLEDGE MANAGEMENT ............................................................. 27

Figure 3.1. Knowledge management as a metalevel activity ............................................ 32

Figure 3.2. Three essential objects in knowledge management functions ......................... 33

Figure 3.3. The knowledge management cycle .................................................................. 34

3.3. PLANNING COMMUNITY-BASED ECOTOURISM ..................................................... 35

Table 3.1. Process models for decision-making and tourism planning ............................... 39

Figure 3.4. The domain of CBE knowledge ............................................................... 43

Figure 3.5. Conceptual model of CBE planning and knowledge management .................. 45
3.4. A THEORY OF ACTION FRAMEWORK ................................................................. 46
  Table 3.2. ‘Theory of Action’ framework for the WWF Philippines case................ 48

3.5. GEOGRAPHY AND KNOWLEDGE ................................................................. 49

4. EMPOWERMENT & EPISTEMOLOGY ................................................................. 52

4.1. COMMUNITY EMPOWERMENT ................................................................. 52
  Table 4.1. A continuum of participation ......................................................... 57

4.2. RECONCILING PLANNING THEORY & PRACTICE .................................. 58
  4.2.1. Complexity in Planning Community-based Ecotourism ....................... 58
  4.2.2. Knowledge Construction, Empowerment & Innovation ....................... 62

4.3. TOWARD KNOWLEDGE MANAGEMENT .................................................. 65

5. CONCLUSION & RECOMMENDATIONS ......................................................... 71

5.1. CONCLUSIONS ............................................................................................ 72
5.2. RECOMMENDATIONS ................................................................................ 73

REFERENCES .................................................................................................. 75
ACKNOWLEDGEMENTS

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>CBE</td>
<td>Community-Based Ecotourism</td>
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<td>KM</td>
<td>Knowledge Management</td>
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<td>LPA</td>
<td>Local Planning Agent</td>
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<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>WWF</td>
<td>World Wildlife Fund (also the Worldwide Fund for Nature)</td>
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INTRODUCTION

The topic considered here is the management of knowledge in the global effort to plan community-based ecotourism (CBE). Practically speaking, knowledge management (KM) refers to the state of affairs, which ensure that the right knowledge within an organization gets to the right people, in the right form, at the right time (Schreiber et al., 2000). The discussions fit under the rubric of sustainable tourism development, which is a convergence of broader thinking about tourism and sustainable development. Discussion about sustainability in tourism development is occurring in various disciplines and professions, and mainstream society. Geographers are among the most active commentators in sustainable tourism discourse, working from both applied and theoretical perspectives.

Ecotourism is at the same time, arguably, both a pillar of sustainable tourism and a topic unto itself. The underlying concepts, principles and strategies overlap with, and to some extent, constitute the current understanding of sustainable tourism. This essay focuses on one of these principles, local participation in ecotourism planning. More specifically, it addresses a core strategy for local residents to participate in ecotourism development, the planning process.

A precise definition of ecotourism will not be provided in this paper. Much time and effort has been expended pursuing such definitions (Fennel, 1999). However, this paper argues that such efforts with their normative biases are largely counter-productive. For just as the concept of ‘research’ supports no connotation of quality, neither will ‘ecotourism.’ Bad ecotourism, like bad research, is entirely possible. Epistemic analysis will, ultimately, reveal the illusory nature of attempts to derive a normative definition of ecotourism. It will accomplish this by illustrating the true complexity in the domain, and thus, the reductionist notions implicit in such definitions. In recognizing this, perhaps we may “steer away from creating a dichotomy between ‘alternative’ and ‘mass’ forms of tourism,” which Milne (1998) argues, “serves little real purpose and diverts our attention away from the interlinked nature of all types of tourism development” (p.47). So herein, ecotourism will simply refer to tourism — a style of “recreation expressed either through travel or temporary short-term change of residence” (Hall and Page, 1999: 5) — where
the ecology is a primary attraction. Its basis in the community is entirely relative and the very subject of this essay.

1.1. THESIS STATEMENT

The objective of this essay is to contextualize a problem observed in the World Wildlife Fund (WWF)\(^1\) international network during a CIDA-funded field investigation looking at the role for non-governmental organizations (NGOs) in CBE development. As this problem is believed to be endemic in the global effort to foster CBE, the paper does not focus specifically on the WWF. The goal, rather, is to enhance the ecotourism literature by situating this global effort to plan and develop CBE in the larger context of knowledge. The paper argues that strategic management of knowledge within and between remote communities will be required for effective public participation and formulation of local visions within planning processes. The premise is that community access to knowledge about planning ecotourism is a key issue in public participation in the planning process, and ultimately, in the achievement of empowerment and sustainability. A theory about the knowledge involved in planning CBE will be essential to understand the opportunities and constraints, which communities face in accessing the knowledge they require. This case is illustrated by synthesizing literature, models and strategies from fields typically disparate in relation to ecotourism (agriculture, training, management, systems science, and knowledge studies). The influence of geography in this multinational effort to plan CBE in remote parts of the planet is an important question. The discussions follow a critical link between knowledge and empowerment, driven by issues that are widely believed to confront tourism development on a general level. By considering other fields where the linkage between access to knowledge and empowerment has already been grasped, this essay aims to inspire empirical knowledge work on the current state and management of knowledge for CBE.

\(^1\) Also known as the Worldwide Fund for Nature, as in the international secretariat based in Gland, Switzerland.
1.2. ORGANIZATION OF THE ESSAY

The main analyses in this essay are structured in three parts. The following section outlines the overall *rationale* for the research that inspired the writing in this essay and the companion paper, *Occupational Standards and Certifications in Community-based Ecotourism: Toward Communities of Practice*. The rationale is based upon the field investigation and compares and contrasts observations made of WWF projects, policies and initiatives in the international network, and of formal knowledge generated by members. An apparent contradiction in CBE knowledge is identified in the network, forming the basis of the overarching research question. That question is then positioned within a global agenda of tourism research needs.

Section three attempts to establish the *knowledge management context* for CBE. This sketch of generic concepts and relationships contextualizes observations from the field investigation. This is essentially the logical justification for KM in the global effort to plan ecotourism in remote destination communities.

Drawing on the basic concepts and ideas from the above context, section four rounds out the analysis by outlining an epistemic foundation for community empowerment. It explores linkages between *empowerment and epistemology*. The discussions suggest how KM can move efforts beyond mere process improvements for planning CBE, facilitating innovation and empowerment.

The final section of the essay presents *conclusions and recommendations* for policy makers based upon the observations and analyses of the three main sections.
Community-based ecotourism development is now widely promoted as a strategy for environmentally sound, economic self-reliance. Where ecotourism ventures have been developed privately, they are typically driven by the principal shareholder(s) with little regard for their implications in the community\(^2\) and ecological context. Decision-making in such a planning context can be swift and effective, in so much as the shareholders objectives are concerned. But if development impact in the public domain is considered, planning typically becomes more complicated. At the extreme, community-based developments must typically appease large and diverse groups of community stakeholders. Planning in the public domain requires consensus on multiple levels. It is typically brought about through the sharing — and ultimately, the mutual appreciation — of perceptions and values of all categories of stakeholders.

As the concept implies, a community stakeholder, in contrast to any other, is one that holds a stake in the community and its well-being or misfortune.\(^3\) The predication of this symbiosis between the fate of people and their communities is a fundamental tenet in our understanding of sustainability as applied to development. As a matter of practice, there is now broad recognition that any future sustainability of tourism development depends on meaningful participation of community stakeholders in local planning processes.

Despite recognition of the important role of stakeholder participation in tourism planning, few jurisdictions have established any form of policy to ensure that participation actually occurs, and in fact, is meaningful. Many governmental and non-governmental organisations advocate community stakeholder participation in tourism planning. The WWF is one outstanding example: The world’s largest independent

\(^2\) The term “community” shall herein refer to the “social group, usually identified in terms of a common habitat (such as a town, village, or district), and implying both a body of common interest, a degree of social co-operation and interaction in pursuit of them and a sense of belonging among the members” (Scruton, 1983: 82).

\(^3\) This may, in practice, entail a broad range of individuals and organizations, including the various levels of government, enterprises, industries, etc. However, in the scope of the planning process it is necessary to consider the nature of their respective “stakes” and the tenure on which they are based.
conservation organisation, with a budget over US $50 million and a network spanning more than 30 countries, advocates that:

local communities have the right to maintain and control their cultural heritage. Tourism must not have a negative effect on local communities’ cultural heritage of historic and natural resources. Their knowledge and experience in sustainable resource management can make a major contribution to sustainable tourism. It is therefore important that they consent to, and participate fully in, the planning, operation and regulation of tourism activities (WWF International, 1999: 2-3).

Various organisations have articulated similarly strong statements of action that bolster the sustainability drive in tourism development. However, the level and frequency of community stakeholder participation in ecotourism developments around the globe are generally being recognized as inadequate in comparison with the pace of development (Brandon, 1993). Apparently, efforts to facilitate effective stakeholder participation in tourism planning have been inadequate, and little has been accomplished to identify and eliminate factors that impede participation.

Ironically, conservation and development organisations, governmental agencies and communities themselves, all look to CBE to provide an alternative source of income to improve quality of life for local people, and thereby, safeguard natural resources. CBE projects are increasing rapidly. This has created desire and demand in many quarters for enhanced capacity to facilitate community participation in ecotourism planning.

The following sections describe the field investigation undertaken in the Philippines and WWF international network, considering efforts to employ CBE as a conservation strategy. The investigation inspired this research to provide an epistemological context for the observations, such that we may better understand the global effort to foster CBE. Global implications are the primary concern.

2.1. THE FIELD INVESTIGATION

Between March and August 1998, the Canadian International Development Agency provided funding to undertake intensive discussions with a network of rural development NGOs in the Philippines, probing opportunities to integrate tourism into their overall
development agenda. Discussions focused on the *Philippine Partnership for the Development of Human Resources in Rural Areas* (PhilDHRRA), a well-established network with considerable international support. PhilDHRRA advocates and implements agrarian reform policy, and serves as a leading architect of sustainable integrated area development strategies in the Philippines. The discussions included WWF-Philippines and stakeholders in their community-based ecotourism initiatives.

The focus of these discussions concentrated on: (1) identifying internal capabilities and organizational objectives to serve as a foundation for promoting and facilitating community-based tourism; and, (2) identifying potential areas of application within the PhilDHRRA network. The specific case of marine ecotourism came to dominate the discussions, as it had emerged in proximity of three prominent member organisations. Two members had previous involvement in what seemed like promising ecotourism pilot sites within their local areas: the municipal whale shark sanctuary at Donsol, Sorsogon; and, the coral reef sanctuary at Apo Island, Negros Oriental. The community on Pamilacan Island in Bohol invited a third member to help reform a failing marine ecotourism development. The developments at both Donsol and Pamilacan Island were initiated by WWF-Philippines.

2.1.1. COMMUNITY-BASED ECOTOURISM IN THE PHILIPPINES

The whale shark sanctuary at Donsol is particularly noteworthy and became the main point of inquiry. The coastal waters of Donsol and neighbouring municipalities were internationally recognised in early 1998 as a seasonal feeding habitat for a relatively large population of whale sharks. WWF-Philippines demonstrated that whale sharks faced a significant threat from over-fishing, and the Philippine Government declared a permanent nation-wide ban on the hunting and trading of whale sharks and manta rays. Shortly after, a tourism council was established in Donsol and the waters within its 15-kilometre coastal jurisdiction were declared a whale shark sanctuary. The rare nature of the species, and the relative size and accessibility of this particular population (presumed to return annually), thrust Donsol into a major conservation-through-tourism initiative.
The experience of Ningaloo Reef in north-western Australia affirms the significance of Donsol's new-found trajectory, according to Top Dive Sites of the World, the Diver Magazine 'Publication of the Year' for 1997. The book observes that:

In the diving world there are some destinations and certain experiences, that are unique. ... the majestic whale sharks of Ningaloo Reef are ... of these legends. A well-run dive boat and spotter plane may yield 10 or more shark dives each day; some divers have been lucky enough to swim with 17 in a single day and up to 45 in six days! That is a lot of whale sharks by any measure, and accounts for the genuinely legendary status of this stretch of Western Australia's desolate coastline (Jackson, 1997: 103).

To put this in perspective, initial interactions with the population at Donsol resulted in over 40 shark dives in a single day. Furthermore, Donsol is relatively easy to access by comparison, and requires no surveillance aircraft to locate sharks. Such conditions hold potential to make Donsol an ecotourism attraction of significant international reputation, particularly, in light of the fact that interaction at Ningaloo Park garners fees of US $1,000 per day.

While efforts were being taken to facilitate visitation and interaction in Donsol's whale shark sanctuary, provisions for a comprehensive strategy and systems for visitor management failed to make the agenda. At the suggestion of WWF-Philippines, a meeting was arranged to discuss a potential role for PhilDHRRA in community organising activities in a future joint-project at Donsol. PhilDHRRA endorsed a comprehensive agenda for marine ecotourism development, aiming to explore the use of key ecotourism development strategies at Donsol, including:

- A participatory planning framework and processes;
- Economic instruments for resource generation;
- Definition of Limits of Acceptable Change (based on Stankey, et al., 1985);
- A comprehensive visitor management strategy;
- Developing the sanctuary into a zoned, protected area;
- Initiatives to find 'ecolodge' alternatives to conventional accommodations; and
- Cooperative enterprise structures.
PhilDHRRA acknowledged its limited experience with ecotourism development, but committed to bringing in leading practitioners in the field to complement its broad expertise in community organising. The proposed list of resource people included, among other widely recognised ecotourism experts, WWF's consultant Elizabeth Boo. WWF-Philippines, in effect, rejected the agenda and broke off communication.

WWF-Philippines eventually withdrew from the dialogue without a clear explanation. Their staff voiced objections to the idea of co-operative enterprise structures and displayed frustration when PhilDHRRA members suggested that the representativeness of the stakeholder group convened at Donsol required clarification. This was after investigations concluded that significant groups of people from the 'basic' or informal sectors had been excluded from participation in the developments initiated by WWF-Philippines. Many people reported that they did not feel that their participation was welcomed. Perhaps most disturbing was the claim by local indigenous people that they were denied participation in the development activities. These people have ancestral rights to coastal waters, protected in the laws of the Philippine Republic. They were proposing a separate, competing ecotourism development, and threatened to invoke their legal rights to control coastal zone development.

As the whale shark ban took affect, Manila newspapers reported the views of fisherfolk: "Give us livelihood or we won't stop hunting the whale sharks. ... If the government will prohibit us from hunting, we would rather go to jail. Can the government give us food and send our children to school?" Furthermore, the advanced capability and response of commercial tour operators — which included endorsement by WWF-Philippines — effectively marginalized local fisherfolk in the distribution of economic benefits from the ecotourism development. A personal friendship between key staff members at WWF-Philippines and a Manila-based tour guide complicated the politics of the Donsol development. The guide was a direct competitor of a rival tour operation, owned by the Chair of the Sorsogon Provincial Tourism Council. Such fragmentation and disenfranchisement of key stakeholders poses fundamental threats to the very essence of participatory conservation and community economic development strategies.
Observations suggest that these problems may not be isolated. The experiences of Donsol were preceded by the failure of virtually the same conservation-through-tourism approach that WWF-Philippines employed on Pamilacan Island. WWF-Philippines attempted to employ virtually the same planning model for ecotourism in the Donsol sanctuary. A key PhilDHRRA member later assumed control of community organising activities in the Community-Based Whale Watching project on Pamilacan Island, after the community members removed the officer installed by WWF-Philippines.

The inclination to replicate a failing development model, as in the Donsol example, speaks to the difficulty of objectively evaluating 'success' in community-based ecotourism development. The efforts at Donsol to development an official 'Code of Conduct' for whale shark interaction further illustrate these difficulties. While the efforts resulted in the production and implementation of a code, guides to the sanctuary — which included the co-ordinator of the municipal tourism office — actively encouraged us to violate four of the seven rules of conduct. The Code was a legitimate objective and accomplishment of the project, and was perceived and reported as such. But, was the Code implemented effectively? Were the local guides ever really exposed to either an image of, or the logic of, 'responsible' conduct? One may speculate if, in fact, the declines in whale shark sightings that were reported the following year were related to the conduct of visitor interactions.

A very similar development at the internationally renowned Apo Island coral reef sanctuary had also failed to empower local fisherfolk to participate in the dive tourism now dominating their tiny island community. The Apo Island project — in several respects, a truly exemplary model of community-based coastal resource management — was under the auspices of the Siliman University Marine Laboratory, another leading conservation organisation and counterpart of WWF-Philippines. In over a decade of intervention, Siliman University failed to implement any form of effective visitor management strategy for the sanctuary. It can be argued that this omission effectively robs local fisherfolk of potential fee revenue from diver-tourists, and encourages them to subsidise the maintenance of the sanctuary for affluent Filipino and international divers. Siliman University even acknowledged that dramatic increases in uncontrolled diving at the sanctuary might be reversing the conservation achievements of the local community.
2.1.2. ECOTOURISM IN THE WORLD WILDLIFE FUND

WWF has undertaken a number of projects and actions related to nature-based tourism, ecotourism, community-based tourism, and environmental aspects of tourism operations. In the policy arena, WWF has carried out research and produced several documents internally, inter alia:

- A study by Elizabeth Boo on nature-based tourism;
- Beyond the Green Horizon, produced jointly with Tourism Concern;
- A submission to the Seventh Session of the Commission on Sustainable Development;
- A WWF Tourism Position Statement.

On the ground, there are a fast growing number of projects dealing with tourism at various levels. In Europe, for example, the PAN Parks initiative has sustainable tourism as a major component; in the Mediterranean, WWF has been looking closely at environmental impacts of mass tourism with a view to developing new policy proposals. The "Linking Tourism and Conservation in the Arctic" project has developed, jointly with indigenous and other partners, a set of Principles and Codes for Tourism in the Arctic, and is now working with local people, through pilot projects, to make sure that those Principles and Codes are implemented. In other regions, WWF tourism-related field projects include protected areas and community-based tourism.

Generally, conservation and development organisations, as well as governmental agencies and communities themselves, are looking at community-based tourism as an activity with great potential to become an alternative source of income to improve the life quality of local people, while at the same time safeguarding natural resources. Thus, an even faster growth of community-based tourism projects is expected, both within and outside WWF. This has already created internal demands to enhance WWF's capacity to deal with this area of activity, and more significantly support communities and local partners engaging in tourism.

The overall institutional development of the WWF network has led to various policies regarding its procedural and strategic concerns. In 1999 WWF International was
moved to articulate an official position on tourism development. The policy includes, among its principle beliefs, that:

- Community-related and social issues are of utmost importance in nature-based tourism development;
- Tourism must be planned and managed in a way that is environmentally sustainable, economically viable and socially equitable;
- Local communities’ knowledge of sustainable resource management can make a major contribution to sustainable tourism, and thus, it is important that they consent to and fully participate in, the planning, operation and regulation of tourism activities.

Furthermore, the policy commits WWF to action, including those that will:

- Raise awareness of sustainable development principles and tools including minimum standards;
- Support the development of the highest possible standards for sustainable tourism; and,
- Develop and implement tourism-related field projects, which promote and illustrate key elements of sustainable tourism.

WWF policies make good use of plain language to articulate the institutional position. However, increasing activity around the integration of conservation and tourism development has led to a proliferation of concepts. Globally, it is very challenging to ensure that such terms are used precisely and consistently. Currently, WWF has neither consistent definitions nor clearly defined principles for relevant tourism concepts in use throughout its network. This is confounding because concepts such as ecotourism, sustainable tourism and community-based ecotourism are employed strategically in planning, design, evaluation and management, and, where long-term comparison and lesson-learning are desired. In fact, there is wide-ranging and vigorous debate about the meaning of such concepts, both within and beyond the WWF global network.

WWF has established a network-wide WWF Intranet website that has clearly aspired to information and knowledge management. Within this intranet, the WWF Project Database aims to provide a portfolio of WWF projects around the globe. It is acknowledged that the present contents may be neither current nor complete. The Project
Database could be a keystone in a future WWF knowledge management strategy. It is unclear, however, to what extent the explicit design of the database attempted to incorporate an information architecture, relevant to WWF's tourism-related initiatives, including its research and communications functions. Attempts to design a tourism-specific information architecture would be seriously complicated by the lack of explicitly defined tourism terminology. A cursory analysis of the database structure revealed only one tourism-specific identifier, "Eco-tourism development" in the "Approach" field. Overlooking the inherent schema or ontology of CBE severely limits functionality of such systems.

2.1.3. EMERGING ISSUES

The ecotourism planning and development processes observed in the Philippines appeared to directly violate several of the fundamental principles and the best practices for planning ecotourism, sustainable tourism and sustainable development generally. Several short-comings can be cited, including but not limited to the following:

- Failure to identify all key stakeholder in the local communities and reasonably understand their individual and collective interests;
- Failure to put-forth a straightforward and inclusive process for participatory planning, though which stakeholders could reasonably influence and direct development in accordance with their vested interests in the long-term ecological and economic well-being of their community;
- Inaccurate and improper methods of assessing both the managerial and development costs, the market value, and the pricing strategy for visitation within the various marine sanctuaries;
- Grossly incomplete determination of needs and issues related to visitor management in communities and adjacent sanctuaries; and
- Failure to anticipate and adequately plan for threats and opportunities related to local community economic development.

The fragmentation of local stakeholder interests observed, in itself, suggests that the local planning agents (LPAs) in these communities — including highly reputable organisations such as PhilDHRRRA, WWF-Philippines and Siliman University, as well as local government officials — failed to inspire and articulate a common vision of CBE.
These thoughts are particularly sobering if one considers the extensive experience that these agencies bring to the communities. Questions arise. Are the projects representative of ecotourism around the world? Are these leading organisations misguided, or are they operating in the dark? Why do they overlook established best practices within the field of ecotourism?

The Ecotourism Society and The Nature Conservancy suggest, in a study of Community Participation in Ecotourism, that NGOs have frequently led communities in darkness:

Community ecotourism ventures are often launched without adequate study and understanding of community structure, community decision making processes, and the type of community development procedures that have been proven to be effective in other forms of community development work worldwide. Many of the consultants and employees of NGOs hired with donor funds to implement community ecotourism projects may lack expertise in community development procedures. This leads to the lack of community support, and little empowerment in the community tourism venture, and ultimately, the loss of faith of communities in the development process. ... Community ecotourism workshops and guidelines need to be prepared to assist NGOs, donors, aid programs, and local entrepreneurs in gaining a better understanding of the community development process. (Epler Wood, 1998a)

While some LPAs indeed lack the guidelines and understanding needed to effectively plan ecotourism, the WWF situation observed in the Philippines is not explained simply by a lack of knowledge. Virtually all of the issues cited above in relation to the ecotourism developments planned by WWF-Philippines are clearly identified in a WWF publication entitled, The Ecotourism Boom: Planning for Development and Management (Boo, 1992). In addition to highlighting the issues, the paper provides a clear process through which communities and their LPAs may assess such issues and plan accordingly. Elizabeth Boo, program officer in WWF US, and an international authority on ecotourism planning first published this technical paper in

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4 It should be noted that the case of PhilDHRRA suggests that community organisers may similarly lack knowledge of conservation. It is no more tenable to assert that, 'I am a marine biologist and therefore have no need to know about participatory planning or economic instruments,' than it would be to say, 'I am a community organiser, so I am competent to plan a marine protected area and establish the limits of acceptable change.' In this field it is vital, albeit difficult, to find a balance in our individual knowledge and skill sets. In general, all parties engaged at the community level can benefit from the ecotourism best practices burgeoning elsewhere in the world.
1992. These guidelines are arguably still within the state of the art for CBE planning around the world. Thus, as a conservation agency, the WWF global network is clearly not lacking the knowledge and expertise to address the ecotourism planning issues observed above. What then explains the predicament?

These observations raise both practical and theoretical questions. Practically, the concern is LPA’s capacity to respond at the community level to tourism development issues. LPAs have an institutional interest in, and commitment to promote and pursue the best vision of sustainable tourism within their knowledge. The issue of capacity is related to their knowledge, and is addressed in the companion essay dealing with the topic of occupational standards and certification for ecotourism planners. The theoretical concern with LPA’s knowledge for planning CBE is the subject of this essay, and the intent is to inspire policy discussion on international assistance strategies to facilitate sustainable tourism development. The overarching research question is “What led communities — under the guidance of WWF — to plan ecotourism in direct contradiction with WWF’s very credible knowledge about CBE?” The overall purpose is to establish the context of this most fundamental incongruence observed in this investigation. The following identifies an agenda of global issues confronting tourism research, which intersects with this overarching question.

2.2. THE NEED FOR RESEARCH

Ritchie (1993) constructed a systematic agenda of issues confronting the tourism sector, identifying various research problems according to key approaches to tourism research. He considered tourism research in light of its "management" function, informing both those that design it — in the form of policy — and manage it, including the development process and its attendant impacts and consequences. "In order to be effective, research strategies must correspond to the nature and level of the issue being addressed" (Ritchie 1993: 204). He suggests that tourism research should be clear about its approach (i.e., policy, managerial, operational, action and evaluation). Furthermore, research may have to vary with both the stage of the process, which is being managed (analysis, planning, execution and control), and by the level of activity that management chooses to address (strategic, managerial/tactical, or operational).
Ritchie’s framework identifies a series of major issues confronting global tourism development, three of which arguably intersect with the management of knowledge for planning CBE. This essay addresses four related research needs, for which Ritchie (1993) recommended a policy or theoretical approach, analyzing the “overall organizational situation with a view to formulating major policy proposals and establishing their priorities” (p.205). Table 2.1, below, outlines these research needs. The intersections between the management of planning knowledge for CBE and these research needs will be demonstrated through the analyses of sections three and four.

Table 2.1. Major issues and theoretical research needs confronting community-based ecotourism

<table>
<thead>
<tr>
<th>RESEARCH APPROACH (THEORETICAL)</th>
<th>MAJOR ISSUES &amp; RELATED RESEARCH NEEDS CONFRONTING TOURISM (selected)</th>
<th>(C) tourism and its human resource needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) POLICY</td>
<td>• Improving public participation and input into tourism development priorities and directions</td>
<td>• Determining the short- medium- and long-term human resource needs of the tourism sector for management and staff</td>
</tr>
<tr>
<td></td>
<td>• Formulating a local visions for tourism development.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identifying the kinds of bilateral and multilateral cooperation and collaboration that are most likely to contribute to successful tourism development in emerging countries</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: adapted from Ritchie (1993).

Policy approach: encouraging and facilitating resident responsive tourism. The agenda identifies two needs related to community participation in tourism development that are germane to the objectives of this essay: (1) improving public participation and input into tourism development priorities and directions; and, (2) formulating local visions of tourism development (Table 2.1, cell 1A). In particular, this essay explores how KM may improve the access of remote communities to CBE planning knowledge.

Policy approach: the north-south gap and related frictions. The agenda highlights a need to identify the kinds of bilateral and multilateral co-operation and collaboration that are most likely to contribute to successful tourism development in emerging countries (Table 2.1, cell 1B). By considering the management of knowledge
that communities require to plan sustainable ecotourism developments, the essay may offer a perspective that will allow NGOs, donors, aid programmes and local entrepreneurs to better understand how to facilitate community participation and empowerment in ecotourism development. In particular, it aims to inspire a discussion of programmatic approaches for a broad transfer of knowledge to communities, and provide alternatives to stand-alone consultancies and one-off workshops and training initiatives.

Policy approach: tourism and its human resource needs. The agenda highlights the determination of human resource needs of the tourism sector (Table 2.1, cell 1C). Toward this end, the essay identifies the potential role and feasibility of standardised and certifiable training for LPAs involved with CBE, and discusses the need for empirical knowledge research in this field.
This section sketches out an epistemic perspective on planning of CBE, discussing the relevant concepts and their relationships. By situating the issues observed in the Philippines within the context of knowledge, this discussion should help grasp the idea of knowledge management, and understand how its strategic role in facilitating access to knowledge can improve public participation and formulation of local visions in planning CBE. The context is sketched by synthesizing literature, models and strategies from fields typically disparate in relation to ecotourism (agriculture, training, management, systems science, and knowledge studies). The influence of geography and scale in this multinational effort is considered. Although by most accounts the analysis that will emerge from this discussion will be cursory, at best, a sketch is arguably what is required at this time. In the same way that a monumental architectural project must begin with simple conceptual sketches, the absence of detail in this contextual sketch further contrasts the issues observed.

The recognition of knowledge as a most crucial asset in the development of organizations emerged during the last decade, and today is widely accepted as a key factor of production in many industries. Our practical understanding of knowledge, in this regard, is greatly advanced by on-going work on knowledge systems, which goes back to 1965. Since then, professional and academic work in knowledge engineering — or the modelling of different aspect of human knowledge — has pushed the theoretical concept of knowledge toward very practical manifestations of epistemology in knowledge systems, including forms of artificial intelligence. The rapid development of technology, and in particular, information and communications technology has been a

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5 Peter Drucker provides offers an extended discussion of our transition to a “knowledge society” in his 1993 book, Post-Capitalist Society.

6 These could include a gamut of terminology from generations of software systems development such as, expert systems, knowledge-based systems, knowledge-intensive information systems, etc., now covered in this umbrella concept of knowledge systems.
major factor driving the transition to a knowledge society. Innovation in this area forms the larger context for work in knowledge engineering.

There are definite boundaries to distinguish knowledge engineering and knowledge management. However, the management work, particularly, the introductory aspects, overlaps considerably with, and is greatly informed by certain aspects of the engineering research. Although the field of knowledge engineering is now becoming active with many contributors, a school of practitioners and academics working under the CommonKADS* banner has established perhaps the strongest link to KM. This is arguably one of the most comprehensive knowledge engineering methodologies published so far. Because of this, the general discussion of knowledge below draws heavily upon CommonKADS literature.

3.1. TALKING ABOUT KNOWLEDGE

This essay is essentially about knowledge, and inevitably draws upon epistemology. It is therefore appropriate to begin this section about the general nature of knowledge by considering the concept of epistemology. Guarino (1995) referred to it as:

‘the field of philosophy which deals with the nature and source of knowledge’ (Nutter, 1985). The usual logistic interpretation is that knowledge consists of propositions, whose formal structure is the source of new knowledge. The inferential aspect seems to be essential to epistemology (at least for what concerns the sense that this term assumes in AI): the study of the “nature” of knowledge is limited to its superficial meaning (i.e. the form), since it is mainly motivated by the study of the inferential process. (p.627)

The concept of ‘knowledge’ has different connotations even in its popular usage. Even within the field of KM there are a range of interpretations. So a working understanding of knowledge is essential. In fact, much ambiguity surrounds the concept of “knowledge,” due to its relationship with “data” and “information.” Schreiber, et al.

7 See Schreiber et al. (2000) for a thorough discussion of the bounds between these fields.

8 This refers to a reusable, object-oriented — i.e. common — approach to the knowledge analysis and documentation system (KADS) originally developed in the 1980s.
(2000: 3-4) offered a particularly effective discussion of the practical distinction between, data, information and knowledge:

Data are the uninterpreted signals that reach our sense every minute by the zillions. A red, green or yellow light at an intersection is one example. ... Information is data equipped with meaning. For a human car driver, a red traffic light is not just a signal of some colour object, rather, it is interpreted as an indication to stop. In contrast, an alien being who had just landed on Earth from outer space ... during the Friday evening rush hour, will probably not attach the same meaning to a red light. The data are the same, but the information is not. ... Knowledge is the whole body of data and information that people bring to bear to practical use in action, in order to carry out tasks and create new information. Knowledge adds two distinct aspects: first, a sense of purpose, since knowledge is the ‘intellectual machinery’ used to achieve a goal; second, a generative capability, because one of the major functions of knowledge is to produce new information. It is not accidental, therefore, that knowledge is proclaimed to be a new ‘factor of production’.

This suggests that knowledge is a fundamental link between action and the achievement of goals (i.e. productivity). It also suggests that knowledge plays a fundamental role in the development of human agency, be it, at the level of the individual or the empowerment of a community or an NGO. The working definition of knowledge by Wiig (1995: 241) — from the knowledge management context — makes this idea quite practical:

Knowledge is the understanding of the relative importance of an organization’s data and information with the ability to know, under any given circumstances (e.g., a specific problem) what data/information is needed, how this data/information can best be used, why this data/information is important, where this data/information is located, and how it can be obtained and when this data/information is needed.

The work of Moscovici, the French social psychologist, presented a conceptual distinction between “common” and “expert” knowledge in his theory of social representations.9 He distinguished between the “consensual and reified universe, the former being the language and knowledge base of everyday conversation and the latter

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9 Pearce et al. (1996: 3) describe social representations as “world views” which people concoct spontaneously, through conversations on the street, at work, when socializing, etc. in the form of non-official philosophies that decisively influence their relations and decision-making.
being the scientific technical world of expertise and education” (Pearce et al., 1996: 182).

The reified universe establishes a chart of forces, objects and events which are independent of our desires and outside our awareness and to which we must react impartially and submissively. By concealing values and advantages they aim at encouraging intellectual precision and empirical evidence. Representations, on the other hand, restore collective awareness and give it shape, explaining objects and events so that they become accessible to everyone and coincide with our immediate interests (Moscovici 1984: 35-36).

In accordance with this distinction of consensual and reified universes, Thrift’s (1985) geography of knowledge claimed “four main types of knowledge go to make up the stocks of knowledge that are available to social groups and to individual actors in modern society” (p372).

1. **Unconscious knowledge:** “forgotten practices” that resurface unconsciously to illuminate action;

2. **Practical knowledge:** or the “massive central core of human thinking” is produced and reproduced through watching and doing in a specific context;

3. **Empirical knowledge:** a stock of knowledge which accrues through a systematic process of rational explanation and organization;

4. **Natural philosophy:** a meta-knowledge that evolves to unify various individual bodies of knowledge into a cohesive whole.

Considering Thrift’s (1985) typology, this essay is primarily concerned with empirical knowledge in the CBE planning process. As with the practical, the empirical knowledge is largely oriented toward

mastery of the conditions of existence, but it is exercised within a learning process which is not only cumulative but systematic and coordinated over large tracts of space and over longer time-horizons, particularly by modern state and economic institutions. ... it is removed from both time and space from the experiences it describes. Empirical knowledge does not depend for its acquisition upon the direct presence of people, but is transmitted through institutions and technologies” (p375-376).
Thrift saw three subdivisions in empirical knowledge. Most relevant to the role of the LPA is the division dealing with,

the aggregation and codification of knowledge about certain specific practices — for example, the law, town planning or engineering. This kind of empirical knowledge forms the basis of most of the ‘professions’, which is hardly surprising since the profession is, historically, one of the first devices used to differentiate a body of knowledge from practical knowledge (Thrift, 1985: 376-377).

Schreiber et al. (2000: 72) have underscored the significance of knowledge in the organizational context, pointing out that “knowledge is the prime enabler to successfully carry out the business processes within the organization, which in turn create value for the recipients of its products or services.” Appreciating this fact requires understanding the organization’s value-creation goals, and how its business processes are supposed to deliver this value. Knowledge assets are a key concept in this regard, referring to those “bodies of knowledge that the organization employs in its process to deliver value” (Schreiber, 2000: 72).

To begin to appreciate and understand the practical role for epistemology in CBE issues observed in section two, it is helpful to consider more of the practical nature and structure of knowledge. The discipline of philosophy has shown, a long while ago, that a good deal of all knowledge is, in fact, not explicit in nature, but rather, of a tacit nature. This fact generally undermines the positivist view of knowledge, as a tangible resource to be tapped, extracted and documented at will. The process of knowing is “engaged, value-bound and context determined,” such that the human mind is in no position to simply reflect “a reality out there” (Scoones, 1994: 24). Schreiber et al. (2000: 70) see this as “background” capability that stems from experience, invoked, at least partly, at an unconscious-level when we solve problems and engage in human tasks. The realization that people probably know more than they think provides a major impetus to gain a better grasp of how we think about, and manage knowledge in the context of our organizations.

Following the distinction between tacit and explicit knowledge, researchers Nonaka and Takeuchi offer a framework to better appreciate the functions of knowledge transfer and creation:
• From tacit to tacit knowledge (i.e. socializations): we can teach each other by showing rather than speaking about the subject matter;

• From tacit to explicit knowledge (i.e. externalization): knowledge-intensive practices are clarified by putting them down on paper, formulate them in formal procedures, and the like;

• From explicit to explicit knowledge (i.e. combination): creating knowledge through the integration of different pieces of explicit knowledge;

• From explicit to tacit knowledge (i.e. internalization): performing a task frequently leads to a personal state where we can carry out a task successfully without thinking about it (in Schreiber, et al. 2000: 71).

Knowledge management (discussed in some detail below) is essentially about fostering these processes in a way than fans an upward draft of knowledge, created and transferred within the full scope of the organization. Schreiber et al. (2000) argue that knowledge engineering is virtually the only scientific method for externalizing tacit knowledge, and a highly effective approach for combining knowledge that has already be made explicit.

Building on this, Wiig et al. (1997: 16) point to the very nature of knowledge to justify a separate field of knowledge management. They point out that knowledge has certain basic properties that make its management quite different than other organizational resources that are more physical and tangible in nature. In particular they see the following characteristics as integral factors in understanding and resolving knowledge management problems:

• Its intangibility and inability to be measured or quantified;

• Its volatility and potential to ‘disappear’ overnight;

• Embodiment in agents that possess independent will;

• Used without consumption, with a possible ‘snowball’ effect;

• Power-laden with wide ranging of impact potential;

• Requires significant development lead time;

• ‘Non-rival’ status allowing unlimited simultaneous applications.
So knowledge can be either tacit or explicit in nature. And the extent to which knowledge is tacit directly influences its abstraction, and thereby, its practical application within an organization. Abstraction makes any concept difficult to grasp. Knowledge engineers recognized this and specified four core features of any occurrence of knowledge, tacit or explicit: (1) the content involved; (2) the time of its availability; (3) the location of its availability; and, (4) the form of its availability (van der Spek and de Hoog, 1995: 387). These features are, in effect, the parameters that define the relative abstraction or tangibility of any given occurrence of knowledge. Given the nature of these features, it is possible for individuals and organizations to anticipate, track, document or affect these parameters. Such capabilities may be cultivated deliberately, in either a systematic or an ad hoc manner, or they may simply be ignored to evolve without intervention. In any event, the extent to which an organization perceives knowledge, as a value-adding asset of its productive activity must, at least partly, be seen as dependent upon such capability.

The notion of organizational ‘knowledge assets’ is thus a key percept in the context of knowledge management. Even in the generic sense, the “asset” concept is ultimately tied to something being explicit in nature, and thereby, “useful” and “contributing”. And so the process of identifying knowledge is fundamental to any effective management thereof. The core features outlined above are conditions on the relative scarcity or availability of any given knowledge within an organizational context. “Knowing what you know” is the crux of the matter. And if knowledge is to be an asset for the organization, then need to be managed like a resource with a view its impending scarcity. Schreiber et al. (2000: 75) point to the following management goals for knowledge, and specify that, “basically, this means that the resource has to be made available:

- At the right time;
- At the right place;

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The point here is not that the ideas or principles on which the knowledge is based are necessarily “abstract, but rather, the knowledge itself, until it is made explicit, is really only an idea in the mind of the persons that hold it. In other words, the knowledge may be factual in natures, but still also exist as an idea only.
In the right shape;
• With the needed quality;
• Against the lowest possible costs.

The inherent characteristics of knowledge discussed here and the managerial challenges implicit in them have made the idea of an inventory of one’s knowledge assets a matter of practical significance. Knowledge inventories, audits, diagnostics, etc., are all popular management techniques that address this basic matter. However, knowledge engineers have superseded the novel business-oriented techniques though knowledge modelling, offering the only principled approach to discern the structure and nature of knowledge.

Knowledge models clarify the structure of knowledge-intensive information-processing tasks. This essay argues that the planning of CBE is such a task, and the discussion below of the generic structures of knowledge is indicative of the profound complexity involved in such planning. Knowledge models are evolving to assist organizations grasp this complexity, by specifying the information and knowledge structures involved within their fields application. The concept of “application” itself is a starting point to begin to unlock these underlying structures. In the context of knowledge, application refers to the overall context resulting from the combination of the three fundamental dimensions of knowledge processing: the domain, the task and the agent, which Schreiber et al. (2000) define as follows:

**Domain.** A domain is *some area of interest*. Example domains are internal medicine and chemical processes. Domains can be hierarchically structured. For example, internal medicine can be split into a number of subdomains such as hematology, nephrology, cardiology, etc. [The domain of tourism planning may be divided into subdomains such as ecotourism planning, small-island tourism planning, etc.]

**Task.** A task is a *piece of work that needs to be done by an agent.* ... we are primarily interested in “knowledge-intensive” tasks: tasks in which knowledge plays a key role. Example tasks are diagnosing malfunctions in internal organs such as a kidney, or monitoring a chemical process such as oil production. [Ecotourism planning may involve such tasks as identifying and inventorying local stakeholders, or diagnosing existing economic issues and potential issues in the community, etc.]
Agent. An agent is any human or software system able to execute a task in a certain domain. For example, a physician can carry out the task of diagnosing complaints uttered by patients. A knowledge system might be able to execute the task of monitoring an oil process on an oil rig. [Or an ecotourism planning might be able conduct the task of facilitate a dialogue with community stakeholders about the health of local businesses.] (pp.22-23)

As for the structure of knowledge itself, CommonKADS suggests that knowledge in a model of any given application could be divided into one of three separate knowledge categories: domain knowledge, inference knowledge, and task knowledge (Schreiber, 2000: 89-90).

Domain knowledge. “This category specifies the domain-specific knowledge and information types that we want to talk about in an application. For example, the domain knowledge of an application concerning medical diagnosis would contain definitions of relevant diseases, symptoms, and tests, as well as relationships between these types” (Schreiber et al., 2000: 89). In the case of CBE, the domain knowledge in the application of diagnosing economic issues in the local community would include specifications of CED methods, indicators and related issues/benefits (e.g., economic leakage analysis, the local market share, and the subsidy of the tourism infrastructure, respectively). The purpose of the domain knowledge category is to describe the principle static knowledge-objects\(^\text{11}\)/information that jointly comprise the domain-application. That is, the subject matter of the knowledge model. The actual description of the category, which is the model itself, is constructed of two types or specifications of knowledge: the domain schema, and the knowledge base.

Domain schema. This is a schematic framework of domain-specific knowledge, constructed through a logically organized list of type definitions, such as concepts, relations, and rule types. This provides an outline of the static knowledge/information structures that are the domain.

Knowledge bases. “A knowledge base contains instances of the types specified in a domain schema.” (Schreiber et al., 2000: 91)

\(^\text{11}\) These are collections of related knowledge that function as entities unto themselves.
In other words, whereas the domain schema provides an "organizational chart" and the "job descriptions," so to speak, the knowledge bases provide the "resumes" of those that currently fill the "boxes" on the org-charts of the individual departments in an organization. Similarly, the schema and knowledge bases of any domain are subject to change in the same way that positions and staff change within an organization.

**Inference knowledge.** "The inference knowledge in the knowledge model describes the lowest level of functional decomposition. ... An inferences carries out a primitive reasoning step. Typically, an inference uses knowledge contained in some knowledge base to derive new information from its dynamic input. ... Inferences are indirectly related to the domain knowledge." (Schreiber et al., 2000: 104). "Two sample inferences in a medical diagnosis application could be a "hypothesize" inference that associates symptoms with a possible disease, and a "verify" inference that identifies tests that can be used to ascertain that a certain disease is indeed the factor that causes the observed symptoms" (Schreiber, 2000: 89). Similarly, the both the "hypothesize" and "verify" inferences apply to the case of CBE planning by, respectively, associating CBE planning and the need to anticipate certain CEC issues, and the by ascertaining which CED methods best serve to generate the CED indicators of concern. The purpose of the inference knowledge category is to describe how the static knowledge/information that makes up the domain knowledge category, can logically be employed as the basis for reasoning within the domain. So the subject matter of this category is the logical basis of the inferences in the reasoning process. The description of this logic constitutes the category and is the model itself.

**Task knowledge.** "Reasoning always has a 'reason.' In other words, an important aspect of knowledge is what we want to do with it. What are the goals we intend to achieve by applying knowledge? [For example, determining the break-even point of entrance fees for a protected area.] ... Task knowledge is the knowledge category that describes these goals and the strategies that will be employed for realizing goals." Schreiber et al. (2000) go on to note that task knowledge typically requires a hierarchical description in which a "top-level task" is broken-down into a series of secondary or tertiary subtasks, etc., with the lowest-level subtasks linking to the inferences. The task knowledge category normally consists of descriptions of two knowledge types: the task and the task method:
A task defines a reasoning goal in terms of input-output pairs. For example, a DIAGNOSIS task typically has as input a complaint, and produces as output a fault category plus the supporting evidence. A task method describes how a task can be realized through a decomposition of the subfunctions. The task and the task method can best be understood as respectively the “what” view (what needs to be done) and the “how” view (how is it done) on reasoning tasks (Schreiber et al. 2000: 112).

This concludes the survey of the nature and structure of knowledge related to a practical epistemology and the management of knowledge. Knowledge modelling or a watered-down variation thereof — a knowledge audit, diagnostics, etc. — is at the heart of all knowledge management strategies. Understanding the nature and structure of knowledge establishes a level of consciousness needed to appreciate the complexity of the theoretical and professional knowledge and skills involved in planning CBE. This understanding is crucial to identify the sources of knowledge involved and the related knowledge bottlenecks. It is fundamental to any assessment of geographic factors influencing the transfer and management of CBE knowledge within and between remote communities. It illustrates the areas of knowledge that would, or would not be appropriate for standardization. And therefore, it is the essential groundwork for considering the feasibility of possible occupational standards and certifications for LPAs. With this in mind, it is thus appropriate to now turn the page and move toward the idea of knowledge management itself.

3.2. THE IDEA OF KNOWLEDGE MANAGEMENT

The previous section discusses the notion of organizational knowledge assets and sketches out the general complexity inherent in the concept of knowledge. The aim of this section is to sketch out an understanding of knowledge management, suggesting how proactive management will be essential to overcome the complexity of CBE knowledge. The essay makes no attempt to instruct or guide a knowledge management process, or to propose a knowledge management strategy. These efforts would be well beyond the scope of this paper. More importantly, such efforts require recognition and acceptance that we have a global problem in the management of knowledge for planning CBE. This is the present focus.
The view of knowledge management presented here draws heavily from the perspective offered by the CommonKADS school. This methodology has now evolved considerably in the decade of its existence, and has become highly structured around the idea of modelling various key aspects of a knowledge management situation. This is indicative of the integration that has taken place between its theoretical and methodological foundations in knowledge engineering, and the imperative of meeting practical demands of knowledge projects in most organizational settings. Schreiber et al. (2000) point out that knowledge engineering has evolved beyond its earlier positivist views of “mining knowledge from the expert’s head” and transporting it in machine-readable format:

Today, knowledge engineering is approached as a modelling activity. A model is a purposeful abstraction of some part of reality. Modelling is constructing a good description (that is good enough for your purpose) of only a few aspects of knowledge and leaving out the rest. Models in this sense are useful because all details of expert knowledge are neither sufficiently accessible to get a complete grip on, nor necessary for the knowledge goals of most projects. A model makes it possible to focus on certain aspects and ignore others. In the CommonKADS view, a knowledge project entails the construction of a set of aspect models which together are an important part of the product delivered by the project. The CommonKADS model suite is a convenient instrument to break down and structure the knowledge engineering process (p.15).

While the emphasis placed on the CommonKADS perspective is admittedly a bias of this essay, this is arguably the most rigorous and methodologically grounded perspective on knowledge management available at this time. Furthermore, the vast and growing body of KM literature available today is largely based around the same initial principle of modelling the knowledge management situation, albeit, typically with much less rigor (e.g., Liebowitz and Wilcox, 1997; Liebowitz 2000; Bukowitz and Williams 1999).

Knowledge management should be seen in the larger context of knowledge work, that is any work that requires the application of knowledge to objects of work (Wiig, 1995: 475). This may involve highly abstract knowledge such as a judge assessing the applicability of a legal precedent, and/or highly concrete knowledge such as a machinist selecting machine feed rates to match a machine to the stock it is cutting. On the other hand, knowledge work can be highly routine in nature or truly specialized. These dimensions of abstraction and specialization appear fully present within the broad scope
of tasks involved in planning CBE. In addition to this general notion of knowledge work that spans centuries, recent decades have spawned a number of application fields where knowledge is increasingly the explicit focus of work projects. These include fields such as, information and communications technologies, computer-based knowledge systems development, artificial intelligence, knowledge engineering and knowledge management.

Schreiber et al. (2000:71-72) provide a very practical definition and working understanding of knowledge management: “a framework and tool set for improving the organization’s knowledge infrastructure, aimed at getting the right knowledge to the right people in the right form at the right time.” They point to general convergence among knowledge management authors, around seven principle functions, including:

- **Identification** of knowledge residing within or beyond the organization;
- **Planning** the organization’s future knowledge requirements;
- **Acquiring or developing** required knowledge;
- **Distributing** knowledge to where it will be required;
- **Fostering the application** of knowledge throughout the organization;
- **Controlling and maintaining** appropriate knowledge quality;
- **Disposing** of knowledge that is not useful.

While these knowledge management functions offer practical insight to the idea of KM, they should be seen in a much larger context, as “embedded in a cyclic model of the learning organization” (Schreiber et al., 2000: 72). This is exemplified by the fathers of the concept, Argyris and Schön (1996:20-21), in a model of “double-loop” organizational learning that distinguishes two essential types of learning. Single-loop learning has an instrumental nature, in that it typically inspires change in action strategies or the assumptions underpinning them, but leaves the values of the strategic approach in tact. In planning CBE, for example, this might involve broadening one’s definition of “costs” in setting entrance fees for a protected area based on a “cost-recovery” management objective where community or ecology are negatively impacted. As new cost factors are realized, fee structures are increased to off-set previously unforeseen management/maintenance costs. Essentially, this implies a single loop of feedback
connecting the cause and the effect. *Double-loop learning* requires a second feedback loop, to interconnect the values (i.e., the significance of the affects) and the initial cause-effect feedback loop. For example, if when changing strategies, the assumptions reveal that the underlying values must change, then there is “learning about the learning.” In the CBE example, this may mean that the negative impact of over-visitation warrants sacrificing the equity of a common fee structure, in favour of auctioning entrances to a handful of high bidders. The value underlying the cost-recovery objective — an equitable distribution of costs — did not influence the first strategy change. But, reconsidering the importance of “access-for-all” changed the underlying value to “access-for-few” and the strategy from fee structure to auction. The notion of “organizational learning” is in this way, the essence of knowledge management.

This model of organizational learning, while inspiring a broad range of work on the subject, has also led to a model of intervention-oriented action research, known as *action theory*. It aims to explain the discrepancy between what an organization says, and what it does by way of its actions, and is thus relevant to the problem observed in effort of WWF-Philippines.

The discrepancy between what people say and what they do is an old story. It is sometimes expressed in the saying, “Do as I say, not as I do.” ... We are saying, however, that there is a theory that is consistent with what they do; and this we call their theory-in-use. Our distinction is not between theory and action but between two different theories of action: those that people espouse, and those that they use. One reason for insisting that what people do is consistent with the theory (in-use) that they hold, even though it may be inconsistent with their espoused theories, is to emphasize that what people do is not accidental. They do not “just happen” to act in a particular way. Rather, their action is designed; and, as agents, they are responsible for the design (Argyris et al., 1985: 82).

By focusing on the knowledge used to produce action, action science contributes to a theory of action. In this way, it constitutes an organization development methodology unto itself, separate from knowledge management. However, it represents one of the most fundamental attempts to theorize knowledge-related problems within organizations.

**Five common knowledge-related problems.** Wiig (1995:8-13) offered a more practical conceptualization of knowledge related problems. He suggested that there are
five typical problems plaguing knowledge workers,\textsuperscript{12} which are helpful in establishing a frame of reference for understanding knowledge management.

- \textit{Knowledge not managed as a valuable asset.} “Commodities” are somewhat the conceptual opposites of “assets.” Many organizations, believes Wiig, have tended to manage knowledge — know-how, expertise, etc. — more like a commodity than an asset. This implies that rather than extracting maximum value and impact from it, the tendency is to hoard it, allocate it frugally, and to wait until it is running-out to begin renewing it. The symptoms and situations associated with this type of problem include: neglecting knowledge in long-range planning; lack of accountability/reward for knowledge sharing; loss or improper capture of lesson-learned; failure to transfer experience before reassignment of expert-staff, etc.

- \textit{Inadequate knowledge at point-of-action.} People are often expected to undertake tasks with inadequate knowledge, because they don’t possess it themselves and it is also not made available to them through knowledgeable co-workers, manuals, systems, etc. This scenario may manifest through systems and situations such as: lack of planning to distribute knowledge to action points; emphasis on training ‘routine’ tasks with insufficient emphasis on understanding “underlying systematic knowledge which allows them to be broad and versatile”; “decisions are made in ignorance”; relations between the providers and recipients become strained and tense; reluctance to take responsibility; failure to benchmark critical tasks.

- \textit{Missed learning opportunities.} “Downstream” feedback is inadequate for workers in the early stage processes to actually see the implications of their actions. The feedback may not be provided or there may be obstructions in the upward flow of knowledge. The related symptoms and situations include: Critical ‘lessons’ not learned due to a failure to capture them or a loss after capture; little or no improvement in effectiveness overtime, despite ample room for innovation; relations between the providers and recipients become strained and tense.

- \textit{Knowledge transfer is narrow.} Knowledge flows — up, down and horizontally within and between processes — may be constricted when there is an over-emphasis on training routine and rudimentary tasks such as in-house procedures, and inadequate emphasis on training workers to deal with ‘exceptions’. This type of knowledge problem may manifest in the form of: workers in knowledge-intensive processes being trained rather than educated; a lack of flexibility and versatility in workers; workers inability to deal with exceptional situations; poor quality in the non-routine work functions and processes.

\textsuperscript{12} Wiig (1995: 475) defines knowledge workers as an “individual who makes his/her contributions [to the organizations business processes] through exercising intellectual expertise and understanding.”
- **Unnecessary division of tasks and decisions.** This situation involves excessive and unjustified separation of the performing of tasks and the making of decisions about them. It may manifest as a result of traditions (especially, divisions in knowledge due to departments or ‘turf’ wars, etc.), expansions, efficiency-aimed reorganizations, powerplays, etc. The affects may be seen in symptoms and situations such as: tossing problems ‘over the fence’ to other departments; unreasonable slowness in processes; pathological reversal of decisions; excessive staffing; cases ‘falling between the cracks’.

While this offers some conceptualization of knowledge-related problems and where KM may be directed, the idea of KM requires a further breakdown of strategy. CommonKADS has at its core, such a conceptual framework of KM, based upon a fairly standard “control theory” perspective (Wiig 1995; Wiig et al. 1997; Schreiber et al. 2000). The most basic level of distinction, presented in Figure 3.1 below, is between the management level and the object level.

![Figure 3.1. Knowledge management as a metalevel activity.](image)

CommonKADS broadly conceptualizes knowledge management as a metalevel activity that manifests on an object level. (Adapted from Schreiber et al., 2000: 76).

This is a fundamental distinction between process and object, however, it still lacks detail. Figure 3.2 presents the object level, which comprises knowledge assets, organizational roles, and business processes. CommonKADS responds at the object level with a suite of aspect models mentioned at the beginning of this section. In particular, this
includes the knowledge model discussed in detail in the previous section, as well as an organization model, a task model and an agent model. Together, the latter three comprise a context level analysis, resulting in a multi-component model of the knowledge utilization context. “Even without building knowledge systems, it is likely that this analysis brings to the surface many measures and improvements that lead to better use of knowledge by the organization” (Schreiber et al., 2000: 50). Furthermore, the models represent the specific aspects of the CommonKADS model suite that relate pertain to knowledge management.

On the other side of the framework, the management level is seen as a process model, as in Figure 3.3, which cycles through three critical phases of conceptualization, reflection, and action. These phases are consistent throughout the CommonKADS literature and represent the essence of KM (Wiig 1995; Wiig et al. 1997; Schreiber et al. 2000), and it is important to consider them in detail.

![Diagram of AGENTS, BUSINESS PROCESSES, ACCESS, REQUIRE, KNOWLEDGE ASSETS]

**Figure 3.2. Three essential objects in knowledge management functions**
Agents participating in business processes that require specific knowledge must have convenient and appropriate access to those assets. The notes indicate the specific models from the CommonKADS methodology that are designed to describe these objects and thus inform the relevant functions. (Adapted from Schreiber et al., 2000: 78).
**Conceptualize.** The main objective of activities in the *conceptualization* phase is to (1) outline the knowledge in the organization, and (2) assess its strong and weak points. The first goal will be served by establishing the knowledge object level, while the second one will be advanced through a knowledge bottleneck analysis, with a particular view to the properties of the knowledge assets identified in the outline. This implies filling in the conceptual structure that CommonKADS proposes for the object level, shown in Figure 3.1.

**Reflect.** The results of the conceptualization phase — a set of bottlenecks, problems, opportunities, weaknesses, etc. — will inevitably for an organization to establish its priorities. The main goal of the *reflection* stage is to produce improvement plans that are appropriate and feasible for the specific context when they are implemented in the final stage of the KM cycle (Wiig et al., 1997: 23).

![Figure 3.3. The knowledge management cycle](image)

*Figure 3.3. The knowledge management cycle*

Knowledge management is in essence, a cyclical execution of these three core activities: conceptualization; reflection and action. (Adapted from Schreiber et al., 2000: 77).

**Act.** The *action* phase implements the improvement plans developed in the previous phase. In the CommonKADS view, this work is essentially not knowledge
management, but typically belonging to adjacent fields, often with unique methods, analyses and techniques. Though not always clear cut, the boundaries are important and knowledge management should not be confused with fields such as:

- **Human resource management.** Focused immediately on the people of the organization, this would typically include strategies such as compensation policies, training, recruitment, and more broadly, programs such occupational standards and certifications.

- **Information technology.** This is a major enabler of KM with a variety relevant strategies including: knowledge systems, decision support systems, work-flow systems, etc. CommonKADS knowledge systems engineering methodology falls under this domain.

- **Organization Development.** The organization of work itself must typically be considered in the management of knowledge, including relevant strategies such as action science, benchmarking business process reengineering.

Distinguishing between an improvement and an improvement plan is critical, as we have seen in Argyris and Schön’s (1996) theory of double loop organizational learning. Action is taken at all levels, from defining and selecting improvements, identifying improvement plans, and implementing improvement strategies defined in the plans. In practice, the processes of defining and selecting improvements and the selection of improvement plans may be a highly iterative. Wiig et al. (1997: 23) point out that the former emphasizes increasing the value of knowledge assets — the goal being mainly value-oriented — while in the latter risk reduction is the dominate concern.

It is important to bear in mind that the purpose of this section, and the essay generally, is not to instruct a KM process, but rather to establish a context to understand the current effort to foster CBE in remote parts of the globe. Each stage in this model of KM presents an extensive and growing set of options for methods and techniques (see Wiig et al., 1997 for a partial review of these).

### 3.3. PLANNING COMMUNITY-BASED ECOTOURISM

The preceding sections sketch out some of the basic concepts and relationships, forming a framework of epistemology, in a generic, philosophical sense. The practicality of such a framework in this essay lies in its relevance to CBE, and in particular, to improving
public participation in the planning process. This section will attempt to relate this
generic epistemology to the situation of CBE planning as it was observed in the
Philippine example above. The interest here is not in discussing the mechanics of
planning CBE or in searching for a normative model for CBE planning. Rather, the
interest is knowledge requirements for participation in planning processes and a model of
what is possibly a typical ‘strategy’ to satisfy those requirements: the strategy that the
WWF relied upon in planning CBE in the Philippines. The objective here in this section,
and of the essay generally, is to explore the present situation, and with-hold prescriptive
analyses.

It should be acknowledged that a vast array of tourism planning approaches exist,
however, there has been little evolution or acceptance of dominant models of tourism
planning. Nearly two decades ago, Getz (1986) concluded that,

tourism planning is predominately project and development orientated,
based on problem-solving planning processes. It is often narrowly
defined and lacks comprehensiveness. What is generally absent is a link
between development planning and systematic research and modelling ...
One significant implication of adopting such an approach would be
the shift from ‘boosterism’ to more rational evaluation of tourism’s
benefits and costs, resulting even in its control or the setting of limits on
its growth. ... An impediment to achieving systematic planning is the
inability to model the tourism system thoroughly (p31-32).

Speaking of the vast knowledge of tourism development that has amassed over the
decades, Butler (1993) noted that "little of it has been incorporated into what passes for
tourism planning. In part, this is because much of what is called planning in the tourism
context is, in fact, marketing and promotion ... this has resulted in much inappropriate
development and in many cases over-development" (p136). Little progress has been
made toward a systematic model of tourism planning. And, there is currently no
consensus — at either the academic or practitioner levels — regarding an effective,
comprehensive model for planning CBE. Pearce et al. (1996) argue that “before
innovative and practical advances can be made in the community-tourism planning arena,
effort needs to be made to advance our understanding of how communities develop their
knowledge of, and attitudes towards, tourism” (p.2). Their findings directly support the
purpose of this paper, to understanding the knowledge in the planning process and the
factors that influence its accessibility — positively and negatively — for remote communities.

The heart of this discussion can be found in the very basic nature of planning itself: Planning is, fundamentally, a process of decision-making. Getz (2001) points out that defining tourism planning is particularly problematic because all applications fundamentally respond to a context created by the local settings, and thus he offers this understanding:

Tourism planning is an application of generic planning principles and methods, based on an understanding of the tourism system. ... Generically, key characteristics of planning apply to tourism as well as to any other field:

1. a future orientation: planning requires vision, setting goals, and implementing strategies to attain goals;

2. politics: in the public domain politicians set the agenda, but are subject to input from many special interest groups; private sector initiatives face public scrutiny and numerous laws and regulations;

3. complexity: planning usually involves many technical inputs and often requires evaluation of complex, interdependent systems;

4. process: planning is more about the process of decision making than the creation of plans;

5. a necessity: planning is a generic management function required by all organisations and individuals.

In keeping with earlier reviews of tourism planning models (Murphy 1985, and Getz 1986), Getz emphasizes here that in terms of process, tourism planning is fundamentally about decision making. If follows then, that based on its future orientation, the inherent complexity, and the nature of the process, planning CBE is very much an example of a knowledge-intensive activity — what Wiig refers to as, “an activity that requires extensive knowledge to perform appropriately” (1995: 474).

Effective decision making entails a time-tested strategic process. Management theorist Peter Drucker has written extensively for nearly forty years about the
effectiveness of decision making in knowledge-intensive practice, including industry, government, non-profit and military operations. One of his key insights from a management perspective is absolutely germane to the discussion of planning as a fundamental process of making decisions about CBE. Drucker (1967) identifies five basic elements in the effective decision making process, the core of which emanates from time-tested rules of medical diagnosis laid down by Hippocrates, and those for scientific observation by Aristotle and reaffirmed by Galileo.

Some models of tourism planning bear a strong similarity to Drucker's model of the decision-making process. The five elements are presented in Table 3.1, below along with two models of tourism planning: Getz's (1986) integrated systems model of tourism theory and planning; and, Boos's (1992) ecotourism diagnostic and planning guidelines. Five distinct and clearly similar stages are evident in each of these process models.

Drucker argues that making the decision-making process is the crucial aspect. While his five elements address decision-making, Drucker (1982) has pointed out, however, that the extensive emphasis that this receives in process-oriented textbooks and managerial-type solutions is grossly misplaced. What is much more difficult, and more crucial than making the decision, advocates Drucker, is to ensure that the decision is being made about the right issue. This is because most often it is the symptoms that are obvious. The logic he gives may be as simple as grade-school mathematics. It is relatively easy to find a mistake in the manipulation, and correct it, if the equation is right. If, however, you get the wrong equation, but you do your figuring correctly, you're unlikely ever to find the real problem. When you define the issue correctly, even if you give the wrong answer, you can eventually go back and correct it. When you give the right answer to the wrong question it is almost impossible to ever find your mistake. What then, are we really going to make the decision about? He argues that, "the first step in making the right decision is to find the right question" (Drucker, 1982). Argyris et al. (1985: 47) support this view in the planning context:

The more difficult problem is not the means-ends deliberation for achieving a given interest, but rather that of seeing 'what really qualifies as an adequate and practically determinate specification of that which is here to be heeded or realized or safeguarded' (quoting Wiggins, p.45).
Table 3.1. Process models for decision-making and tourism planning

<table>
<thead>
<tr>
<th>THREE MODELS</th>
<th>ELEMENTS OF EFFECTIVE DECISION MAKING</th>
<th>INTEGRATED SYSTEMS MODEL OF TOURISM THEORY AND PLANNING</th>
<th>ECOTOURISM DIAGNOSTIC &amp; PLANNING GUIDELINES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Determining if problem is generic and resolvable only by a rule-based decision, a principle</td>
<td>Goal formation</td>
<td>Assess the current tourism situation</td>
</tr>
<tr>
<td></td>
<td>Defining specifications which the decision must satisfy (i.e. the &quot;boundary conditions&quot;)</td>
<td>Projection and evaluation of goals</td>
<td>Determine a desirable tourism situation for the area</td>
</tr>
<tr>
<td></td>
<td>Thinking through what is &quot;right&quot; — the solution which will fully satisfy the specifications — before negotiating compromises, adaptations, concessions, etc.</td>
<td>Evaluation and selection of alternatives</td>
<td>Strategize about how to reach the desirable tourism situation, and write a formal Ecotourism Strategy document</td>
</tr>
<tr>
<td></td>
<td>Building into the decision the action need to carry it out</td>
<td>Control and implementation</td>
<td>Actualize the strategy as outlined, and establish a monitoring system and procedures to solicit feedback</td>
</tr>
<tr>
<td></td>
<td>Providing &quot;feedback&quot; which tests the validity and effectiveness of the decision against the actual events</td>
<td>Control strategies needed to obtain desired future</td>
<td>Evaluate impacts, and to modify and adjust the strategy accordingly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluation and feedback</td>
<td>Feedback</td>
</tr>
</tbody>
</table>

The point here, is that planning CBE is not just a process of decision-making about, say, limits of acceptable change, for example, or any other singularly important topic or symptom. The above perspectives suggest, rather, that the most crucial aspect of

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13 Getz's presentation of this model is after earlier work by Chadwick's on "planning as a conceptual system".
planning is likely the making of a decision-making process that will determine whether or not issues such as these limits are ever raised for discussion. Bachrach and Baratz (1970) argued that this is often a deliberate political tactic, and suggest the valuable theoretical construct of "nondecision-making":

a decision that results in suppression or thwarting of a latent or manifest challenge to the values or interests of the decision-maker. To be more nearly explicit, is a means by which demands for change in the existing allocation of benefits and privileges in the community can be suffocated before they are even voiced; or kept covert; or killed before they gain access to the relevant decision-making arena; or, failing all these things, maimed or destroyed in the decision-implementing stage of the policy process (p.45).

Thus, the making of this decision-making process is essentially the "setting of the agenda." Hall (1994) has recognized this as an issue of control in the tourism planning and development context, distinguishing "decisions" from the "direction of decisions" (p169). Empirical research is needed to better characterize this duality in the decision-making function of CBE planning processes.

In the way of working terminology, from this point forward the control aspect covered by Drucker's five elements will be refer to as "decision-making" and the setting of the decision-making agenda as the "direction-of-decisions." The latter could include at least three key areas of control that remain largely obscure in the visions of participation in tourism planning heretofore: (1) the responsibility of identifying the issues that warrant decisions; (2) responsibility for identifying who will play a role in the five elements of the decision-making (esp. the third element — deciding what is "right"); and (3) responsibility for determining the specific methods/tactics that representatives identified in two will use to participate in the decision-making. Control of these three areas is arguably the crux of power in any CBE planning. And the nature of these responsibilities elevates the direction-of-decisions to a quasi-institutional role in the destination:

The formation of an institution is marked by the making of value commitments, that is, choices which fix the assumptions of policy makers as to the nature of the enterprise, its distinctive aims, methods and roles. These character defining choices are often not made verbally, they might not even be made consciously ... the institutional lead is primarily an expert in the promotion and protection of values ... leadership fails when it concentrates on sheer survival. Institutional
survival, properly understood, is a matter of maintaining values and distinctive identity (Haywood, 1988: 112; quoting Selznick, 1957: 28).

It is worthy of note, that regardless of who assumes control for the direction-of-decisions, any range of actors may legitimately be asked to play a role in the decision-making without a significant succession of powers.\textsuperscript{14} This may include a broad range of representatives for local citizens and interest groups, external interests, and/or consultants, facilitators and expert resource people. Decision-making seems to be the focal point of most visions and discussions of local participation, including the various typologies of participation, which are discussed below. However, as mentioned previously, this paper is not about the mechanics of planning CBE and therefore doesn't deal with specific decision-making.\textsuperscript{15}

Pearce et al. (1996) address the role of common knowledge in the community's participation in the decision-making aspects of tourism planning based on the notion of social representations (discussed above). According to this view, the community's ability to participate in decision-making arises from less formal, and perhaps inadvertent, management of everyday common knowledge which virtually all people share and access — to some degree — by virtue of their membership in Moscovici's 'consensual' universe. For example, fishermen in the community of Donsol above who lack formal education, still develop through socialization an understanding of local politics, governance, as well as practical domains of knowledge such as marine ecology. Nevertheless, there is recognition that community members commonly have severe limitations in their information about tourism, and therefore, the participatory process must be designed to confront the limitations and actively provide information (Peace et al. 1996: 183). Logically though, local people will be more knowledgeable of the

\textsuperscript{14} Pearce et al. (1996) have noted that there is debate over the impact of participation on the power associated with formal authority positions, and thus, a need to distinguish from powers. They point out that if the “exercise of influence [through participation] is effective, then this formal “power” of the authority holder is an empty shell” (p184-185).

\textsuperscript{15} For a discussion of models of tourism planning, see Getz (1986 and 2001) who argues that “tourism planning models are largely normative, concerned with how to do tourism planning (usually how to develop tourism), or how to manage growth” (2001: 9).
everyday conversations pertinent to their own community, and thus, local participation in the decision-making is legitimized.

The point here is that many different peoples, interests and agencies can legitimately qualify to participate in the decision-making process. But, who qualifies to participate in the direction-of-decisions? In other words, who determines the decisions to be made in planning CBE, and how so? The multi-dimensional nature of CBE, it aims and objectives arguably escalate the complexity of this domain, over say, ‘mass’ tourism, which is frequently planned in oblivion, especially regarding issues of sustainability.

The direction-of-decisions is certainly one of the most knowledge-intensive of tasks in the planning process and possibly involving the most abstract forms of knowledge. This responsibility is maintained almost exclusively at an executive-level, the domain of the local planning agent (LPA). In fact, the LPA can be a single individual or an entire agency, or even a consortium of agencies all of operating in varying degrees of coordination and autonomy. Nevertheless, the three key areas of responsibility related to the direction-of-decisions essentially define the role of the LPA. Planning agents are referred to as local, not because they necessarily originate in the local community, but rather, because they fundamentally control the interests of the local community, regardless of their origins. Clearly, such responsibilities require special knowledge and skills, and truly qualified LPAs are quite likely few and far between.

Denning and Grieco (2000) point out the real complexity and knowledge-intensiveness of planning and implementing participatory development:

Even an ostensibly small and simple development project can involve multiple dimensions of economic, financial, technical, environmental, social, cultural and political considerations ... no single ‘expert’ may be able to comprehend the totality of the domains of knowledge involved in the activity. Participants who possess technical expertise in one area may lack understanding in another (p.1867).

This underscores a need and requirement for someone, or ideally, a group of participants, to have a basic understanding and appreciation of the ‘big picture’.

Figure 3.4, below, offers a conceptual representation of this complexity in CBE. This Venn diagram considers the planning of CBE from the perspective of three primary
bodies of knowledge: (1) the domain of CBE development knowledge (i.e. the dotted line); (2) the body of CBE planning knowledge in-use by the LPA (i.e. the grey lines); and, (3) the body of knowledge that could be considered essential for planning CBE, regardless of location (i.e. the dashed line). These bodies of knowledge arguably

**DOMAIN OF SUSTAINABLE COMMUNITY ECONOMIC DEVELOPMENT**

![Diagram](image)

**LEGEND**

| D^x | Disciplines and Professions (1 ... X) |
| D^y | Techniques, Heuristics, etc. (1 ... x) |
| "ESSENTIAL" PLANNING KNOWLEDGE |
| CBE Domain Knowledge |
| Planning Knowledge "in use" |
| "Essential" Knowledge |

---

**Figure 3.4. The domain of CBE knowledge**

A descriptive model in the form of a Venn diagram showing the domain of community-based ecotourism and a conceptualization of the present state of planning knowledge.
are sub-sets of a large, loosely-defined domain of knowledge for sustainable community economic development. In the diagram this larger domain is depicted by the heavy black rectangle and subdivided into ‘X’ number of academic disciplines and professions, each of which is assumed to incorporate ‘x’ number of theories, techniques, heuristics, etc. That portion of the essential knowledge, which is complementary to the knowledge in-use — shaded grey — is perhaps the main priority for empirical research, since it is both critical to success, and as yet, unutilized. This diagram primarily represents knowledge in Moscovici’s “reified” universe.

As in other domains, the executive responsibility of direction-of-decisions for CBE development clearly requires knowledge above and beyond that of the consensual universe. Such ability is rooted in a complex synthesis of common and expert knowledge, which the LPA derives through the more formally and systematically managed reified universe, which typically is not immediately accessible to members of a community at large. Figure 3.5, below, conceptualizes this distinction in knowledge and its accessibility for decision-making and direction-of-decisions as it was observed in WWF-Philippines’ CBE planning process in Donsol. It further illustrates the relative position of the LPA’s three key areas of responsibility, both in the transfer/flow of knowledge, and in the realm of influence on stakeholder, community, society and the ecological environment.

Local planning agents play a pivotal role in the planning process and their capability, above and beyond qualifications, hinges on the effective management of knowledge. Community stakeholders commonly rely upon LPAs such as non-governmental organisations or private consultants, not only to set the agenda for tourism development in their community, but also to represent their interests in planning processes. This is a deferral of responsibility for the direction-of-decisions and significant aspects of the decision-making, which may be implicit or explicit. Regardless, LPAs are often the stakeholders’ primary, if not exclusive, source of knowledge regarding both the domain (CBE development) and the task (participatory planning). These agents have irrefutable influence on the participation of stakeholders in the planning process, and the knowledge they possess and have access to, is arguably a key factor in the direction of that influence. Therefore, the practical and theoretical knowledge underpinning LPA’s capability is unquestionably a focal point in discussing the effectiveness of stakeholder participation in planning CBE.
Figure 3.5. Conceptual model of CBE planning and knowledge management
An explanatory model illustrating how the community of Donsol, Philippines accessed knowledge in WWF Philippines’ process of planning CBE, and the connection to the ecological environment through the development process and the community’s ability to articulate limits of acceptable change (LACs).
Currently, however, there is no clear consensus about the knowledge that defines the domain of ecotourism development. Nor is there even a working consensus about the problem solving method(s) that could best define participatory ecotourism planning. In spite of the serious consequence of poor planning, consultants, NGOs and stakeholders alike, are entrusted to development fragile ecosystems without so much as clear guidelines for effective planning.

On the basis of this and the preceding three sections, the next section will conceptualize the issue of KM observed in the pilot study outlined in Section Two.

3.4. A THEORY OF ACTION FRAMEWORK

This discussion of epistemology in CBE planning puts perspective on the over-riding concern of this essay that was articulated at the end of section two. Briefly restated, this concerns the conditions, which led LPAs (WWF Philippines) to contradict their own ‘cutting-edge’ policy on sustainable tourism during efforts to plan CBE in Donsol. The context of this incongruence of theory (WWF's Tourism Position Statement) and action (Donsol’s CBE planning process), and of the resulting breakdown of public participation, may be found in the above discussion on the idea of knowledge management.

It was observed in Section 3.2, that the idea of knowledge management stems from a more wide-reaching theory on organizational learning, which has been greatly advanced in the work of Argyris and Schön (e.g., 1996). Recall that theory of action analyzes how organizations and individuals undertake action by revealing multiple, usually contradictory theories of action at play. Argyris, et al. (1985) argue that this action science provides a framework with which we can understand the true nature of the actions we take, and how the resulting consequences come to either fulfil or fail our aspirations and desires. Although theory of action is intervention-oriented, diagnosis and intervention are well-beyond the scope of this paper. It is contemplated here in a cursory
way to illustrate that KM issues dominate the “frame” conditions or context that belies the incongruence observed between WWF’s actions.\textsuperscript{16}

Table 3.2, below, presents a theory of action conceptualization of the situation observed in CBE planning efforts in the Philippines. It should distinguish two different theories of action (the \textit{espoused theory} and the \textit{theory-in-use}), for each of two different — but arguably, related — sets of issues (planning CBE and the management of knowledge). The pilot study and subsequent investigations within the WWF global network provided the following insights for this exercise:

- June 1998 - Inquiries with WWF Philippines provided copies of the destination development plans for their CBE developments in Donsol and for their earlier project in Pamilacan Island. The office indicated that it was unaware of the \textit{Ecotourism Diagnostic and Planning Guidelines} by Boo (1992).

- June 1998 - Inquiries with WWF USA main office in Washington DC, publisher of the technical report, \textit{Ecotourism Diagnostic and Planning Guidelines} by Boo (1992), indicated that staff were also unaware of the publication.

- July 1998 - Inquiries with Elizabeth Boo, former employee and current consultant of WWF USA, provided the \textit{Ecotourism Diagnostic and Planning Guidelines} by Boo (1992, extract also published in Lindberg and Hawkins 1993).

- January 1999 - Inquiries with WWF International in Switzerland provided a copy of its official, \textit{Tourism Position Statement}. In addition, the \textit{People and Conservation} unit reported that, no formal policy or procedures for knowledge management were in effect in the global network. The network’s central library in Switzerland is unaware of the \textit{Ecotourism Diagnostic and Planning Guidelines} by Boo (1992). The corporate intranet revealed (as late as May 2000) no significant knowledge management infrastructure.

- January 1999 Inquiries with WWF UK, one of the network members most actively involved with research on CBE, indicated that it was also unaware of the \textit{Ecotourism Diagnostic and Planning Guidelines} (Boo 1992).

What explains the discrepancy between WWF’s ‘espoused theory’ of CBE and its ‘theory-in-use’? Could it be that the former was never espoused? This prospect rationalizes the focus on KM herein.

\textsuperscript{16} Schön (1983) has observed that \textit{framing} establishes the context in which a problem should be dealt with, leading to situational appreciation in the problem-solving process.
Table 3.2. ‘Theory of Action’ framework for the WWF Philippines case
A theory of action conceptualization of the incongruence between theory and practice in planning CBE in Donsol, Philippines.

<table>
<thead>
<tr>
<th>THEORY OF ACTION</th>
<th>ISSUES</th>
</tr>
</thead>
</table>
| • Tourism Position Statement  
• Ecotourism Diagnostic & Planning Guidelines (Boo 1992) | No policy or formal procedures in place as of May 2000. |
| WWF’s ecotourism plans for Donsol (Libosada, 1998) & Pamilican Island (Holtz, 1997) | *Ad hoc* measures as of May 2000, (e.g., publication of technical reports, corporate intranet postings, etc.). |

The point here is that all knowledge within an organization is subject to some degree of management (or mismanagement), regardless whether it is deliberate and proactive or entirely inadvertent and *ad hoc*. In this case, the WWF network has had no formal policy or procedures to facilitate deliberate and proactive KM. It is, in essence, a theory for theory espousal, and with out a regard for it, it is not surprising that the WWF network failed to “manage” its own *espoused theory* of planning CBE. In effect, we can conclude that the *ad hoc* theory of KM in use within the WWF network — i.e., publishing technical reports, use of the intranet, etc. — was clearly inadequate in managing excellent knowledge on CBE planning that was formed within this same network, on the other side of the world. This is not to suggest in anyway that, just because members are aware of the network’s *Tourism Position Statement* or Boo’s (1992) guidelines that they will, in fact, acted in accordance with them. In this respect, without a rigorous application of the *action science* methodology it is impossible to draw any causal link between the lack of KM procedures and WWF Philippines’ apparent contradiction of network policy.

However, on the other hand, it is equally unreasonable to expect any agency or LPA to act upon knowledge of which they’re unaware. “All actors ... can only work with the knowledge they have and that knowledge shapes what they can perceive as and fashion into ‘rationality’” (Thrift 1985: 380). If the espoused theory of CBE planning is truly a knowledge-intensive, then there is a need for deliberate and proactive KM strategies and procedures. KM itself must also be espoused and implemented in the form of theory or policy. Failing this, contradictions in action should come as no surprise.
3.5. GEOGRAPHY AND KNOWLEDGE

Immediately, the geographical challenge is reducing spatial variations in the knowledge that underpins effective planning of CBE, in particular, scarcities in remote destination communities. To gain some insight to the factors that belie such variations, this section considers geographical dimensions in the management of CBE knowledge within and between such locations. A limited consideration of the “geography of knowledge” is evident in literature (e.g. Thrift, 1985).

The geography of knowledge is that aspect of systematic geography which deals potentially with knowledge and belief of all kinds, whether religious, scientific, philosophical, aesthetic, practical, or whatever else. The various forms and manifestations of knowledge are investigated in the light of their distribution and areal relationships (Wright, 1947).

Despite more than fifty years of consideration, the geographical factors within knowledge-related problems and the functions of KM (outlined above) currently have no significant presence in the literature. Nevertheless, the geographical challenge of this paper warrants some consideration here.

Thrift (1985: 388) pointed out that three key developments of the nineteenth and twentieth centuries could be credited with a rapid reduction of spatial disparities in the availability of empirical knowledge, at least in certain parts of the world:

1. the implementation of formal, compulsory education systems, which has brought into existence a “common level of knowledge”;

2. the increasing speed and efficiency of “transportation communications” bringing about ‘space-time convergence’;

3. the proliferation of mass media, and increasingly, information technologies that contribute to, and make available large bases of common empirical knowledge.

These developments can be seen, respectively, as a resolving of certain technical issues related to the construction, standardization, dissemination and embodiment of knowledge — at least, on certain levels to certain degrees. Geographic factors have certainly challenged any accomplishments on these issues, and fundamentally, in the dissemination of knowledge. From the above discussions, such developments arguably constitute successful acts of KM. However, Thrift contended that:
Spatial variation in the distribution of empirical (and practical) knowledge still exists and may even be relatively stronger than in the past, but is increasingly tied to the social distribution of empirical knowledge in a pattern of sequestered life-spaces. Thus, the social distribution of empirical (and practical) knowledge is associated with institutional nodes like home, school, university or office which form a set of points that selectively channel the life-paths of actors according to their membership of a particular social group (Thrift, 1985: 388).

Global disparities in development clearly entrench these issues in many regions of the world today, nearly two decades later. Thrift’s argument is absolutely germane to CBE, which is now widely promoted as a strategy for ecological conservation and human development in economically-poor-yet-ecologically-rich destinations around the world. Even within a G8 member-country such as Canada, geographically-based disparities the availability of knowledge can be clearly seen in remote locations, prime for CBE. Thus, Thrift’s observations are insightful for the present challenge, in that the geographical factors affecting both the implicit technical and social issues he discussed, continue to affect the management of CBE knowledge within and between remote communities.

Denning and Grieco (2000) characterize some very practical implications of geography on dialogue, a process that cuts across most functions of KM and planning CBE. In relation to their argument that dialogue among participants is absolutely necessary for successful participatory development, they illustrate how spatial gaps resulting from the typical geographical dispersion of participants in development projects manifest as knowledge-bottlenecks.

Where expert knowledge is locked in the heads of experts who may not reside in the developing country, access to critical inputs for success is severely curtailed. ... Dispersion can be temporarily relieved by physical travel. ... [But] there is usually not enough time to develop the kind of relationship in which dialogue or even discussion can flourish. Time constraints are binding. Organisational pressures and deadlines bear down upon the participants. Discussion and dialogue can easily drift towards confrontation and ultimata, through no ill-intention of the participants (Denning and Grieco 2000: 1874-1875).

They pointed out that information and communication technologies, such as e-mail, the Worldwide Web, and video-conferencing have proven, at least, partly effective in overcoming such communicative gaps in development assistance efforts within Africa — the slowest region in the world to establish interconnections.
Overall, the issues raised by Thrift, and Denning and Grieco begin to suggest some possible dimensions to consider in conceptualizing the influence of geography on knowledge-related problems and corresponding KM solutions in planning CBE:

- **Knowledge.** Foremost, the CBE knowledge to be managed probably includes empirical knowledge as an immediate priority (since in many respects it is almost completely lacking in many destinations), but also practical knowledge, and ultimately, even natural philosophy.

- **Location.** The geographical challenge probably involves linking two basic types of locations: remote communities — a destination for knowledge, and a potential site of knowledge formation — and major institutions and agencies, which are the primary source of scientific, reified, expert knowledge, and a major site knowledge formation. The latter tend to be in economically advanced countries and almost exclusively in urban centres (e.g., universities, UN agencies, NGO headquarters, etc.).

- **Gaps.** The essential geographic challenges probably amount to overcoming various types gaps: cultural, linguistic, spatial, legal and regulatory, jurisdictional, political, educational, and technological. Overcoming virtually any of these gaps automatically raises a parallel concern for financial and/or time resources available.

- **Levels.** Potentially, such gaps could manifest in the form of knowledge-bottlenecks at several levels: community-to-global, community-to-national, community-to-regional, and community-to-community.

- **Functions.** Across any given level these knowledge bottlenecks may affect, in varying degrees, any one or a range of different functions in KM (discussed in section 3.2): identification, planning, acquiring or developing, distributing, fostering application, controlling and maintaining quality, disposing, etc.

Section three has outlined a scope for epistemology as it might be to the planning of CBE. It has further contextualized the observations and apparent contradiction between policy and practice as it was observed in the WWF’s efforts to plan CBE in and around the communities in the Philippines. This context is a fabric of basic epistemic concepts, principles and theories of knowledge and agency. Its consideration can lead to a fuller appreciation of the inherent complexity of the CBE domain, and in the same stroke, confront the enigmatic nature of knowledge and its tacit roots. In this, lies an argument for the deliberate and proactive adoption of strategies and procedures to manage CBE knowledge. The procedural options are a topic for a separate paper. The next and final major topic of this discussion will be a strategic vision for KM in this context.
The preceding sections have suggested that an epistemological context befits CBE planning, and discussed how a disregard for the management of knowledge in that process has led to a breakdown of community participation in the process. It was argued that the role of LPAs, as directors of the planning (or decision making) process, is both knowledge-intensive and pivotal in facilitating community participation and sustainable development. This section explores how KM can improve community participation in the planning of CBE. In this view, community participation is strategically linked to the LPA, and empowerment fundamentally depends on local control of that position. Implicit in the calls for local participation, is a need to develop and bolster local human resources in this capacity. The analysis explores where and how KM strategies could focus in order to improve community participation and input in CBE development, and discusses the relationship between potential improvements and the formulation of genuinely ‘local’ visions in planning process.

### 4.1. COMMUNITY EMPOWERMENT

Improving public participation and input into priorities and directions for CBE will require greater clarity and strategy in the objectives of the planning process. This section illustrates how status quo visions of participation in tourism planning are neither particularly clear nor strategic in their objectives. It will propose a new vision for participation with community empowerment as its ultimate goal, and discuss the role of KM in realizing this vision.

Several researchers posit a fundamental dependence of any future sustainability of the tourism industry upon effective local control of the development processes, through meaningful community participation in planning and globally competitive entrepreneurship at the local level (Murphy 1985, Haywood 1988, Ritchie 1988, Blank 1989, Getz 1991, Poon 1993). An overwhelming obstacle to this participation has been summarised as "a form of tokenism in which decisions or the direction of decisions has already been prescribed" (Hall 1994: 169). Such tokenism arises from "barriers to the public airing of policy conflicts", created — consciously or unconsciously — by local...
political institutions' and leaders' control of "what people choose to care about and how forcefully they articulate their cases" (Crenson 1971: 27). These controls arguably lie in the process of direction-of-decisions. Peoples' knowledge or of the issues at hand — and the lack thereof — is, therefore, undeniably a critical factor in the exercise of such "control" and the rise of "barriers" to participation. Thus, the state and the accessibility of knowledge for CBE planning and development issues are matters of critical concern for conservation and development agencies in the global effort.

Hall (1994) has characterized the status quo, arguing (with the support of Bachrach and Baratz, 1970: 7) that:

Community-oriented approaches to tourism planning (e.g., Murphy, 1985; 1988; Blank, 1989; Getz, 1991) posit a pluristic approach to tourism development. In the pluralist view of power and decision making, 'power is totally embodied and fully reflected in “concrete decisions” or in activity bearing directly upon their making' ... Furthermore, the pluralistic basis of community tourism planning assumes that all parties have an equal opportunity to participate in the political process (p169).

Although it doesn't preclude it, participation literature clearly has not projected a vision of local control over the direction-of-decisions. Murphy (1985: 159; 171-172) provides a historical review of the vision of participation up to the mid-1980s. Literature on public participation in tourism planning widely acknowledges the rights, abilities, and benefits of local community members participating in decision-making processes, especially, regarding the future sustainability of tourism as an enterprise and conservation strategy (e.g., Murphy 1985; Haywood 1988; Pearce et al., 1996; Mowforth and Munt 1998; and Bramwell and Sharman 2000). Much literature has — perhaps pragmatically — focused on community involvement in the decision-making aspect of planning. Involvement in the decision-making is clearly emphasized in definitions of the commonly held understanding of the concept of participation. Haywood (1988) defined community participation in tourism planning as “a process of involving all relevant and interested parties (local government, officials, local citizens, architects, developers, business people, and planners) in such a way that decision making is shared” (p106). Nearly a decade later Pearce et al. (1996) reaffirm the emphasis on the decision-making aspect in their view that “community participation in the tourism planning process may generally be
understood as the involvement of individuals within a tourism-oriented community in the decision-making and implementation process with regard to the major manifestation of political and socioeconomic activities" (p181). There has been no vision of participation extending beyond the decision-making into the ‘expert’ or ‘executive’ realm of the direction-of-decisions.

Much of the embracement of community participation in tourism planning amounts to rhetoric. This surfaces in literature in the form of questions regarding the possibility that tourism planning can successfully incorporate the participation of local communities (e.g., Taylor 1995). In discussing the “community-based approach” to tourism planning, the World Tourism Organization clearly expresses this ‘cautious support’ by beginning with a qualification: “To the extent possible, there should be maximum involvement of local communities in the planning and development of tourism” (World Tourism Organization, 1998: 43).

There is considerable critical discussion of participatory processes and the consequential or even intentional marginalization of community members in them (Simmons 1994: 99; Mowforth and Munt 1998). Various attempts have been made to characterize the reasonable expectations for participation in tourism planning in the form of typologies (see discussions in Haywood 1988: 108; and Mowforth and Munt 1998: 240), and through participation “objectives” (in Simmons 1994: 99), “forms” (in Pearce et al. 1996: 183) and also “goals” (in Haywood 1988: 110). Although useful in developing our understanding of the mechanics of community participation, these works fall short of advancing any significant vision for local control over the making of the decision-making process. Despite inclusive interpretations of “community” as in Haywood’s (1988) definition above, the visions of community participation in the tourism planning literature lack clarity in their consideration of the control structures implicit in the planning process. Thus, it is not surprising that the strategic proposal advanced to communities and the LPAs in the global effort to foster community-based development are, in generally, quite vague.

The point, however, is that status quo vision fails to address the control of the decision making process, which is often imported from outside the community, or worse still, from outside the country. And in practice, “unfortunately, most nature tourism
projects emphasize a beneficiary approach and decisions about projects, employment, and the overall type of development to be promoted are often made far from the site” (Brandon, 1993: 139). The implication is that local authorities and lay people alike often have no control over the direction-of-decisions, and the literature does not strategically target any such role for them. Furthermore, assigning local authorities that lack adequate knowledge to control the direction-of-decisions exemplifies the “tokenism” to which Hall (1994) has referred. Such control is easily usurped by local and/or external interests, and often, designed for manipulation.

Epistemology has been largely absent in the discourse on community tourism planning. The social representations perspectives by Pearce et al. (1996, chapter six) represent a first significant contribution, but focuses primarily on the decision-making aspect (Drucker’s five elements, especially the third one). There is really no empirical research to illuminate the potential role and influence of public involvement in the direction-of-decisions for CBE planning. The degree to which input at this level has ever been sought/desired by LPAs may itself be questionable. What is clear, is that the extrication of this ‘executive-level’ of tourism planning activity has not yet been pursued, not to mention the unique knowledge and skill-set that contribute to success in it. Haywood’s (1988) call, for “a framework for encouraging a more participatory approach to tourism planning” has yet to be realized (p106). Analytical consideration of this duality in the decision-making function of tourism planning, its implications and the differing knowledge requirements it imposes, can contribute much toward a clear and strategic objective for participation in CBE planning.

Empowerment will require local control of decision-making, and, the direction-of-decisions. A community’s direct contribution to identifying the decisions to be made is both a basic criteria for its empowerment and an important measure of its participation. Table 4.1, below, suggest how this distinction may serve as the basis of a control-based continuum of participation ranging from absolute dependence to absolute empowerment. This distinction between the direction-of-decisions and the decision-making is also an essential framework for considering the overall situation of managing knowledge for planning CBE. By externalizing the critical “control” dimension this framework establishes a clear goal for participation in the planning process; a state of “empowerment” where only local interests control both decision-making and direction-
of-decisions. The tangible and unequivocal nature of this goal would move participation strategies toward a more quantifiable result than has typically been sought.

Drucker (1967) has argued that “to make decisions is the specific executive task” (p113). The implication here is that while participation has sought community involvement, the executive positions — the LPAs in CBE — make the decision-making process. Ultimately, the empowerment of the local community in developing CBE must focus on the direction-of-decisions. Visions of participation that set empowerment as their goal have typically not targeted the explicit preparation of appropriate local entities to assume control of the direction-of-decisions. The point is that empowerment will come, not simply from local “involvement”, but rather, by ensuring that entities in the community have adequate access to expert knowledge in the reified universe, so as to expertly control all elements of the decision-making process.

This vision of participation begins to establish a clear objective for efforts to facilitate CBE. It suggests a strategic direction for the discussion of participation in CBE; the preparation of communities to assume control of the direction-of-decisions, arguably the most crucial aspect of the planning process. If empowerment is the true objective in development, then we will have to: (1) learn to manage the knowledge that LPAs need to competently direct decisions in CBE development; and (2) apply KM so as to provide people in remote destination with the essential knowledge required to take on the LPA role.

In this regard, practical epistemology can contribute to clarifying the nature of the CBE planning process vis a vis. issues of control and empowerment. Such clarity is essential for competent planning and accountability in collaboration and cooperation efforts that aim to support community interests. If empowerment is not the end objective, then tourism policy makers have a moral obligation to reconcile this with communities and donors. It is important to keep these aims in perspective. As Milne (1998) points out, sustainable tourism development requires global-level action as well as participation at the local and community levels:

There is no guarantee that ‘bottom-up’ community based planning in the pursuit of development will be any less piecemeal, or more sustainable on a regional or global basis, than previously adopted ‘top-down’ approaches. Indeed, coordination from higher levels in the spatial
hierarchy may be necessary to avoid the problems associated with unilateral actions (p42).

Table 4.1. A continuum of participation
Distinguishing between the control of decision-making and the making of decision-making: This table points toward a control-based definition of community participation and empowerment in CBE planning.

<table>
<thead>
<tr>
<th>THE CONTINUUM OF PARTICIPATION</th>
<th>ASPECTS OF CONTROL IN CBE PLANNING</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>DIRECTION-OF-DECISIONS</td>
</tr>
<tr>
<td>DEPENDENCE</td>
<td>No Local Control</td>
</tr>
<tr>
<td></td>
<td>Full External Control</td>
</tr>
<tr>
<td>PARTICIPATION</td>
<td>No Local Control</td>
</tr>
<tr>
<td></td>
<td>Full External Control</td>
</tr>
<tr>
<td>PARTICIPATION +</td>
<td>Control Shared by Local &amp; External Entities</td>
</tr>
<tr>
<td>PARTICIPATION ++</td>
<td>Control Shared by Local &amp; External Entities</td>
</tr>
<tr>
<td>EMPOWERMENT</td>
<td>Full Local Control</td>
</tr>
<tr>
<td></td>
<td>No External Control</td>
</tr>
</tbody>
</table>

The objective, ultimately, must be for local control of the CBE planning process, nested within the planning and regulatory structures at regional, national and global scales.17 Furthermore, it must be acknowledge that once local control of the direction-of-decisions is attained, there is still a need to negotiate and maintain an appropriate distribution of power among ‘local’ interests in the community. Nevertheless, improving community participation in the planning process is an enterprise of increments. Controlling the decision-making process within the community — as opposed to, without the community — is arguably a key first step toward empowerment.

17 For a view of these structures see WTO (1994 & 1998).
4.2. RECONCILING PLANNING THEORY & PRACTICE

Clear and genuinely local, visions of ecotourism in the community will flow forth naturally in those communities, which are truly empowered. This is the argument and this section illustrates that the creative input and participation needed to inspire such visions are found at the nexus of common and ‘expert’ knowledge. Unlocking this nexus requires sustained interaction between these two realms of knowledge, and an embrace of their probable transformation. An epistemological perspective can strengthen our appreciation for KM in this process, and could inform strategies to facilitate community participation therein. However, the global effort to foster CBE is radically different from any corporate-level KM project. Its vastness, its ambiguities and lack of cohesion, to say the least, warrant a very unique approach to KM. While this paper cannot offer the kind of empirical foundation to make proposals for even one agency in this effort, this final section will attempt to fashion a somewhat of a ‘compass’ with which to guide future considerations.

4.2.1. COMPLEXITY IN PLANNING COMMUNITY-BASED ECOTOURISM

Decades of assistance efforts, including human development and environmental conservation, have both confronted and evolved an increasingly complex reality for community participation in sustainable development. A study of CBE by USAID, The Nature Conservancy and The International Ecotourism Society clearly reflected this reality (Epler Wood, 1998a). And recently, Denning & Grieco (2000) have articulated it in some detail:

> Non-governmental organizations have helped to mobilise popular interest in the development process. The increasing number of explicitly interested parties makes the management of multiple participants, multiple viewpoints and multiple objectives more and more complex. (p.1867).

Although they have not assumed a KM perspective, the factors they suggest highlight two of the fundamental dimensions of knowledge-related problems identified in section three: the domains and agents. In particular, they suggest that the knowledge requirements associated with development assistance are typically overwhelming, due to evolution of
our understanding of the domains and the spectrum agents now involved. Regarding evolution of the domains involved, they argue that the “increments in complexity are exponential,” and in terms of agents, “the number of stakeholder interests and relations is steadily growing” with “continuing adjustment of roles and behaviours in the overall dynamic of the development ecology” (Denning and Grieco, 2000: 1867-1868).

This reality is sinking in, and suggestions have been made that ‘experts’ responsible for planning sustainable development — in organizations and communities — should strive for a flexible responsiveness to the unique situations faced by human-beings (e.g., UNESCO, 1981; Haywood, 1988; Scoones and Thompson, 1994; Pearce, et al., 1996; Denning and Grieco, 2000). For example, Haywood (1988) has argued that, although helpful, Getz’s (1986) systematic model of tourism planning (outlined above) is, from a practical point of view, burdensome. Experience from the world of business indicates that the imposition of a comprehensive approach to the organization of planning activities is illusory. Rather than seeking panaceas through planning models, emphasis should be placed on finding planning modes to fit different situations. ... Improvements in the decision-making process will be required (p!10).

The argument is that the rigidity of models typically has not accommodated the inherent complexity of development. Constructive criticisms emphasize the role of design creativity in development projects and advocate the need to foster “invention”, “transformation” and “innovation” in planning processes. The strategic — and for some, paradigmatic — shift in approach comes with the recognition that expert knowledge cannot stand in isolation from common knowledge. Community planning processes should facilitate epistemic interaction and synthesis, and prepare the respective ‘reified’ and ‘consensual’ universes for transformation.

Haywood (1988: 110) has suggested that in order to do this we need to reconcile planning theory with the realities of practice. His argument: planning is in theory, inherently “rational”, but in practice, it is typically quite “irrational”. This incongruence impinges on the demands of unique situations through political derailment of processes and the curtailment of creative thinking. Haywood (1988: 110) advocated reconciling planning theory and practice through a “situational” approach based on essential perspectives of planning as a process for:
• designing the future;
• innovation;
• learning;
• influencing; and,
• managing.

This implies responding to situations from any or all of these perspectives, "iteratively and adaptively, at each interaction tapping the knowledge of those individuals who understand the alternatives in their environmental context" (Denning and Grieco, 2000: 1869). Practically, this requires an "equitable decision-making base" that enables the community, through knowledge of the issues, to "identify the relationship between what 'can be' and 'what should be'" (Haywood, 1988: 112). An equitable balance in knowledge between planners and participants is the only opportunity for effective checks and balances on control in the direction-of-decisions and decision-making.

Of three possible perspectives on "planning as a process for designing the future," Haywood (1988) raised a particularly critical issue for community participation in the planning process: the choosing of alternatives. He argued that this is the "normative" role of planning, and suggested that it has been highly neglected by tourism planners. Apart from the direction-of-decisions, discussed above, this is arguably the most critical aspect of the planning process in determining the potentially beneficial or detrimental nature of CBE impacts in the community. This aspect of the planning process, probably more than any other, can either commit the community to unsustainable decisions, or close the 'door' on important opportunities. Failure to involve the community in this process means that interests other than key stakeholders control the development. The consequences of not involving the community should therefore underscore the need for community participation. However, there is evidence that many communities have little knowledge of the system and business of tourism development, and often, they have very little information about local initiatives as they happen. (Pearce et al., 1996: 213). So moreover, this underscores the need for knowledgeable participation:
If the planning process is to succeed, the public participants must have good information, and, to be fully informed, the participants must have access to full information on the tourism industry. Industry members must be willing to invest time in briefing meetings and the like. Similarly, if the commitment to time is to be fruitful then everyone may have to learn new negotiating skills. ... Clearly, participants need a range of tools on which to draw. These include conciliation, mediation, arbitration and the establishment of superordinate goals (Haywood, 1988: 109).

And there is recognition that the complexity of situations is related to the sequestration and stagnation of knowledge. The number of diverse perspectives to be reconciled contributes much of the complexity found in community tourism planning. But, ‘a persistent condition underlying social conflict is the differing set of subjective assumptions and levels of awareness by which groups perceive the same objective set of circumstances’ (Hazel Henderson as quoted in Haywood, 1988: 109). The social representational view of tourism knowledge concluded similarly, that: “arguments in tourism conflicts are often not over the facts of the case but rather how the different knowledge systems interpret those facts” (Pearce et al., 1996: 214). In other words, faced with the potential to share knowledge, diversity only accounts for one factor in the situation.

Clearly, the literature on participation in tourism planning has begun to realize the limitations of the knowledge available in communities. Pearce et al. (1996: 214) conceptualize the relative condition of tourism knowledge in the form of “tourism-aware” or “tourism-naïve” communities, and point out that the relative differences in knowledge will directly affect the potential for public participation. For example, ‘participation’ in less knowledgeable communities may be preoccupied with information exchanges, while stakeholders in knowledgeable communities are more likely to share in the power and contribute to design. The implications for community empowerment are clearly significant:

There are some voices that will not be heard in the final tourism decision because they simply lack power to influence the decision process. A failure to recognize the importance of who has the power in tourism decision making will make for ineffective community participation (Pearce et al., 1996: 216).
These commentators clearly articulate the concern for knowledge held by community stakeholders. But, who is to inform the participants and do the facilitating, as they suggest? The situation observed in the Philippines underscores the central argument of this paper, that concern and vigilance regarding the knowledge of LPAs is fully justified. The pilot study suggests that when LPAs are themselves unaware and lacking adequate and appropriate knowledge, they not only fail to provide the community with information, but worse, may impart knowledge and information that is wrong or false. And this seriously compromised the direction-of-decisions for the community as a whole.

It is here, that epistemology is informing practice, most intensively in business (Schreiber, et al., 2000; McAdam and McCreedy, 2000) and organizational development (Argyris, et al., 1985; Argyris and Schöen, 1996), but also in facilitating sustainable agriculture (Grigg, 1978; UNESCO, 1981; Scoones and Thompson, 1994; Röling and Wagemakers, 1998). In an epistemological context, the role and significance of uniting common and expert knowledge in planning CBE becomes clear. Furthermore, such perspective can greatly inform a strategic — that is, a deliberate, proactive and focused — response to the management of knowledge in both universes, within and between the institutions and remote destination communities.

4.2.2. KNOWLEDGE CONSTRUCTION, EMPOWERMENT & INNOVATION

Epistemology has recognized that knowledge construction typically involves extensive interaction with and between what Moscovici identified as the ‘reified’ and ‘consensual’ universes (Chombard de Lauwe, et al. 1981; Moscovici, 1984; Thrift, 1985). On a general level Pearce, et al. (1996: 217) acknowledge that a community’s “system of tourism knowledge is both influenced by and influences science” (p.217). But this recognition extends beyond the general to the more intensive, more practice-oriented area of knowledge formation, the process of innovation, which also depends heavily on this

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18 They point out that well-publicized research findings about tourism impacts, for example, quickly move from the reified scientific universe to the public domain, and in the process change attitudes and understanding within destination communities. And on the other hand, social representations from the community stand to influence scientific and expert knowledge, for example, in research funding competitions. Grant adjudicators, who are often non-experts, may respond to issues raised by media reports or through social interaction.
interactivity (McAdam and McCreedy, 2000; Berque 1981: 49). And this now drives great interest in knowledge sharing. Not only does the sharing of knowledge benefit the recipients, the interaction of the participants frequently leads to the expansion of knowledge beyond the sum of individual parts. Individual recipients may be empowered by knowledge not previously in their awareness, but collectively, the process forms new knowledge that drives innovation.

There is support for this in McAdam and McCreedy’s (2000) broader situational view of KM as transformational change. Their characterization of “scientific” and “social” paradigms of knowledge construction parallel Moscovici’s (1984) distinctions between the reified and consensual universes. They point out that the fact based approach to knowledge construction which characterizes the scientific paradigm, biases in favour of people learning the ‘right facts’ or those politically aligned with power structures of the local organizational environment.

If KM is solely restricted to this scientific paradigm of knowledge construction then there is likely to be only a partial organisational transformation in terms of increased business benefits and employee emancipation. Improvements will be restricted to increased efficiency rather than the reframing necessary to produce challenging innovation in regard to the organisation and its employees. ... the most effective way to get new knowledge into the organization is to widen the conception of knowledge construction within the organization, to include both scientific and social paradigms” (McAdam and McCreedy, 2000: 158-160).

19 Chombard de Lauwe, et al. (1981) discussed the corollary from a perspective of endogenous development theory, which is itself, central to innovation theory, currently discussed in political economy:

The transfer of knowledge confers power ... [Furthermore,] the profession of technical knowledge confers an ascendancy not only on the dominant groups within a society but also on the dominant groups in international life, so that inequalities linked to knowledge are acquiring increasing importance in the present world. ... In industrial civilizations, the transfer of technical knowledge is the point of departure for the transfer of other forms of knowledge. It usually serves as a pretext for forums of economic, political and cultural domination, which vary according to whether the recipient countries or groups can or cannot bring pressure to bear in the negotiations. ... the only means of escape from these processes of domination is to discuss the formation, exchange and sharing of knowledge, not its transfer (pp. 57-8 & 274, emphasis added).

20 “Innovation is essentially new ways of doing things be it in relation to products, processes, people or technology etc.” (McAdam & McCreedy 2000: 160).

KNOWLEDGE MANAGEMENT IN PLANNING COMMUNITY-BASED ECOTOURISM PAGE 63
Their argument suggests a quasi geographical basis to innovation. The wider, socially-constructed view of knowledge — which they argue is consistent with a critical perspective — leads to previously untapped reserves of knowledge that inspire the reframing of problems. Access to these reserves comes, in part, by promoting and facilitating the exploration of knowledge across far flung geographies and social diversities. And the emancipation and empowerment they suggest, comes not from mere exploration, but from the equitable sharing of knowledge. As ‘experts’ and LPAs come to appreciate the value of these reserves there should be conferment of power, ideally formally, to the people that embody the knowledge. This social construction of knowledge implies and requires, in principle, a dissolution of structures, such that any agents concerned may navigate the domain freely — literally or virtually — regardless of status. Learning expands as groups and individuals gain access to new skills, competencies or perspectives, which can ultimately lead to emancipation and empowerment through the realization of their needs, potentials and aspirations.

This interactiveness within and between realms of knowledge is the “equitable decision-making base” that unlocks innovation, which Haywood (1988: 112) advocated in the “situational” response to the complexity of community participation in planning. And there is recognition that such sharing of knowledge is potentially empowering for both the planners and the stakeholders alike. For example, Poon (1993) recognized such a linkage in arguing that radical innovation is one of four key requirements in competitive strategies for tourism industry players. Competitive success requires a culture of innovation in which managers — in addition to doing the training — must continually learn from employees: “For these are the ones who are in touch with the pulse of the consumer and the day-to-day running of the organization” (Poon, 1993: 273). On the other hand, Bramwell and Sharman (2000) recognized an empowerment of the community at large:

Community participation in tourism planning can also build on the store of knowledge, insights and capabilities of the different stakeholders, and the sharing of ideas among these stakeholders can result in a richer understanding of issues and might lead to more innovative policies (p.27)
The fundamental tension intertwining knowledge construction, empowerment and innovation has been aptly summarized by Chombard de Lauwe, et al., (1981) who advocated knowledge sharing in the form of ‘self-training’ or, in other words:

taking both traditional culture and external contributions as a basis with a view to creating something new. On the one hand, traditional education transmits knowledge and systems of representations and values that are peculiar to a society or group but does not prepare the ground satisfactorily for the receipt of knowledge from abroad. On the other hand, models of education imported from dominant countries detract, deliberately or otherwise, from everything that has its own origin in the basic culture, while encouraging those dominated to seek the particular type of education which, in their eyes, is the only avenue to advancement in the new society. If the transfer of knowledge is to offer any opportunity for endogenous creative activity, it must be fed with resources from within and this is possible only if those concerned assume the responsibility for their own training in order to overcome domination (p283).

They conclude that self-training based on an empowered knowledge sharing maybe the only way that communities will ever overcome the disregard that ‘experts’ have typically shown for traditional knowledge; a disregard, which often paralyzes community initiative and leads to entrenchment behind traditionalism, frequently to the point of rejecting innovation.

Self-training implies a free-flowing exchange of knowledge where learners have the freedom to reframe, develop and redevelop their understandings, right up to the level of one’s world view. For KM to facilitate innovation in the practice of CBE planning it must foster this kind of interactive knowledge sharing within and between the knowledge generating institutions and the LPAs, and, LPAs and the community stakeholders, and ideally all three. This sharing must be accompanied with a preparedness on all sides to accept a changing world view. The final section will suggest practical directions to guide future KM efforts.

4.3. TOWARD KNOWLEDGE MANAGEMENT

The above discussed the role of knowledge sharing as a vehicle for innovation in CBE planning, which will contribute to the situational responsiveness advocated by Haywood
(1988). Furthermore, the LPA — who controls the direction-of-decisions — is primarily responsible for facilitating this knowledge sharing, and ensuring that community participation and input is sufficiently broad. This argument effectively highlights three priorities for KM in the CBE context: broad-based knowledge construction, and the *embodiment* and *dissemination* of knowledge. These concepts were introduced by McAdam and McCreedy (2000) and are essentially meta-functions, which probably involve, in overlapping fashion, several of the seven principle KM functions (outlined in section three) at once. In combination, they will incorporate most of the KM process. Nevertheless, as theoretical constructs they may be easier to visualize and lead to a more meaningful understanding of the KM process than the more mechanistic breakdown by Schreiber, et al., (2000). That is, in part, because the functions themselves may, in reality, happen more tacitly than explicitly.

The wider conception of knowledge construction — based on the sharing of expert and common knowledge — was discussed in principle, above. In reality it probably draws upon at least three principle KM functions, the identification, planning and acquisition/development of knowledge. In terms of the planning process, LPAs facilitate this through community participation. As well, LPAs, along with academics, professionals and technicians, etc., may assume responsibility for facilitating broad knowledge construction above and beyond the planning of any one venture or destination, in the form of primary research on issues related to CBE. The observations from the Philippines suggest that the former role should be considered a priority for LPAs in the near to mid-term, since there is already potentially good and appropriate knowledge that is not being utilised. Efforts should, at this time, concentrate on implementing knowledge already in existence, by way of innovation inspired to respond to local situations through community participation. This includes, of course, innovations in methods for participation and input.

The LPAs are also the focal point for the embodiment and dissemination in the context of CBE planning. Disseminating knowledge may involve KM functions such as distributing and fostering the use of knowledge, as well as controlling and maintaining its quality. The LPA is an active intermediary between the institutions that generate expert knowledge in the reified universe, and the community stakeholders who ultimately receive, interpret, implement it, and respond to it, either directly or indirectly. The
publication of technical papers — such as WWF’s *Ecotourism Planning and Diagnostic Guidelines* — is an example of knowledge dissemination.

Observations of WWF-Philippines suggest, however, that in addition to dissemination, the embodiment of knowledge is also an issue. That is because knowledge, itself, is not all important;

culture is composed of both knowledge and creative potentialities. Without this creative element, its development would be inhibited, and no society can live without putting the elements it has received to an original use in order to find new openings for development (Chombard de Lauwe, 1981: 57).

Technical knowledge published within the WWF international network was not being used, largely because it was not embodied by the agents planning CBE. The embodiment of knowledge involves KM functions such as the identification and acquisition/development of knowledge, as well as fostering its usage.

The socially broad knowledge construction, as in meaningful community participation, has specific implications for both the embodiment and dissemination of knowledge. McAdam and McCreedy (2000: 161) point out that the social construction of knowledge presents unique challenges to the embodiment and dissemination, when compared with more purely scientific or technical knowledge. This includes a variety of serious organizational, people, and process and technology issues. Cutting across these issues is the need for dialogue. McAdam and McCreedy (2000: 166; after Tom Peters) and others have argued that the dissemination of knowledge depends fundamentally on dialogue across the organization, at all levels. “The complex steadily changing problems of development may require collective learning through continuing dialogue for extended periods, if durable solutions are to be found” (Denning and Grieco, 2000: 1872).

If there is a human behaviour that belies, and to some extent, symbolizes KM in CBE, it is *dialogue*. This is the interactive-most end of a continuum of types of conversation, the polar opposite of which is one-way conversation such as ‘telling’ that involve no interaction. This continuum is part of the excellent understanding of the term dialogue offered by Denning and Grieco (2000), bringing together a number of fundamental perspectives:
The purpose of dialogue is to go beyond any one individual's understanding. The key characteristic of a dialogue is that each participant is not trying to "win", since all participants win in a genuine dialogue. In dialogue, individuals gain insights that could not be achieved individually. A new kind of mind comes into being which is based on the development of common meaning. People are no longer primarily in opposition, nor can they be said to be interacting; rather they are participating in the pool of common meaning, capable of constant development and change. In dialogue, a group explores complex issues from many points of view. Individuals suspend their assumptions but they communicate their assumptions freely. The result is a free exploration that brings to the surface the full depth of people's experience and thought (p.1871).

In their discussion of dialogue in development decision-making processes, Denning and Grieco (2000: 1876-1878) caution that the "feasibility of dialogue" as a knowledge-creating, -sharing and -transferring strategy, in traditionally managed organizations is, in fact, quite "iffy." They have therefore identified four institutional conditions to enable constructive dialogue in the development process:

1. **Personal mastery of skills needed for dialogue.** In particular, this implies understanding when and how to suspend one's own hierarchical and organizational privileges such that other participants in the dialogue resist withdrawing from the conversation because of incorrigibly rigid or unwholesome motives, or even the perceptions of privilege of rank, organizational authority, or political dogma. They argue that this is a precondition of dialogue, which cannot be taken lightly.

2. **Flattening hierarchical structures and cultures.** It is argued that "Hierarchies are antithetical to dialogue". Structural solutions are called for to flatten hierarchies and relieve authority figures of the privileges of position, which will obstruct their clear access to dialogue with subordinates. "Depending on individuals to accomplish this systematically seems unrealistic".

3. **Enhancing permeability of information flows.** Progress has been made in fostering transparency through dissemination of information in paper-based documentation. Technology is dramatically improving the potential to share documented information, and is key to facilitating genuine dialogue.

4. **Organizing data and knowledge.** Perhaps most central to this essay, Denning and Grieco (2000) acknowledge the fundamental role of management in ensuring access to knowledge in the development process. They recognize, in relation to international development assistance, the important need to study the knowledge work of innovators in other sectors, including the private sector, because they "have shown the way forward in terms of managing knowledge assets, and the lessons of these organizations point the right direction for the development..."
organisations if they are to take advantage of the potential of the new technology” (p.1878).

Knowledge management is, in fact, much more than dialogue. It comprises a vast array of methods and techniques, some of which are discussed in the companion essay, *Occupational Standards and Certification for Planning Community-based Ecotourism*. Nevertheless, dialogue embodies the essence of KM. It provides a meaningful interpretation of what must happen in order to adapt this inherently technical and formal framework, to the often ambiguous and human-centred field of CBE. In this regard, it may be both fitting and helpful to conclude with a more concrete and practical image to inspire the deployment of KM in the global effort to foster CBE:

*Learning networks* combine specialists from various disciplines and disseminate knowledge widely throughout the organization, *communities of practices* usually involve people from the same professional discipline and are concerned with knowledge dissemination within that community (McAdam and McCreedy, 2000: 165, emphasis added).

In this image learning networks and communities of practice should go hand in hand. A community of practice for LPAs cannot yet be formed because there is currently no such thing as a LPA, in any formal sense. Clearly specialists will always, and should always exist. However, a formalized network of diverse specialists engaged in planning CBE could be evolved and inspire some specialists to become generalists in a community of practice for LPAs. This community of practice would be united by members shared knowledge and ways of knowing that evolve through their shared experiences of action. This would constitute ‘situated’ learning (McAdam and McCreedy, 2000: 165).

Thus, a vibrant community of practice for LPAs should be the ultimate goal for the global effort to foster CBE. And, a learning network — and more specifically, a knowledge network — should be the strategy with which it can be built and maintained. The unique knowledge context and challenges of CBE discussed in this essay make a community of practice a particularly useful image to inspire KM work in CBE. Presently, specialists from various disciplines are taking on the role of the LPA with minimal organizational structure, and almost no coordinated dissemination of knowledge. Yet, as argued the role of LPAs is crucial to effective community participation and sustainable development itself. The priority concerns of knowledge construction, embodiment and
dissemination all revolve around the LPA as key intermediary between the reified and consensual universes. Even though, as Denning and Grieco (2000) pointed out, no single ‘expert’ may be able to comprehend the totality of the knowledge involved, “there needs to be a minimal shared understanding of the nature of the problem and the game plan being followed to deal with it, and how other players are likely to react as the game plan evolves” (p.1868).
5. CONCLUSION & RECOMMENDATIONS

Each section of this paper has advanced an argument. United, these arguments support of an overall theoretical argument, that deliberate and proactive management of knowledge for CBE is a necessary step to improve citizen participation in the planning process. And the focal point in this management effort must be the LPAs who typically are control of the direction-of-decisions. A review of these arguments shall aid the drawing of conclusions and recommendations:

- Section One argues that at least four generally recognized research needs could be advanced by studying the current state and management of knowledge and public participation in planning CBE.

- Section Two argues that a basic problem in access to knowledge for LPAs in remote areas is thwarting community participation in the planning of CBE, and that knowledge management issues belie that problem.

- Section Three advances five separate but interlocking arguments: that CBE planning knowledge is part of a large domain with an inherently complex structure; that knowledge management principles offer a practical response to that complexity; that observations suggest an inherent epistemological structure in CBE planning resembling a chain of decision-making processes that are almost exclusively in the tow of LPAs, and whose weakest link is likely knowledge; that the theory of action framework advanced by Argyris and Schön may be very insightful in understanding the role of KM in international efforts to foster CBE planning; and, that geographic factors should be a key consideration in applying the principles of KM in this effort.

- Section Four argues that community participation is strategically linked to the role of the LPA, and community empowerment fundamentally depends on local control of that position. It argued further on three points: (1) The inherent complexity in destination communities requires a reconciliation of planning theory and practice in the form of situational responsiveness; (2) This responsiveness will come through innovations, based on a broad, socially constructed knowledge, which is formulated through the participation of stakeholders sharing knowledge with LPAs; and, (3) To facilitate this sharing a global effort must be made to form learning networks for specialists engaged in the planning of CBE, with the goal of establishing a community of practice for LPAs.
5.1. CONCLUSIONS

The introduction identified three policy issues driving this essay: (A) encouraging and facilitating resident responsive tourism; (B) the north-south gap and related frictions; and, (C) tourism and its human resource needs. The discussions above point to several conclusions at a theoretical level.

**Encouraging and facilitating resident responsive tourism.** Public participation and input into CBE priorities and directions depend fundamentally on the competencies of the LPAs whom control the direction-of-decisions that constitute the planning process. The knowledge that underpins such competence is vastly complex and involves multiple domains and problem solving methods. Innovative planning visions of CBE that respond to the situational complexity inherent in most destination communities will require participation to effect a wider socially-constructed knowledge that is based on knowledge sharing between stakeholders and LPAs.

**North-south gap and related frictions.** The kinds of bilateral and multilateral cooperation and collaboration that are most likely to contribute to successful CBE development in emerging countries are those that improve access to knowledge required by remote destination communities in the planning process. Formalized learning networks for CBE planning specialists, and ultimately, communities of practice for LPAs are practical ideas to inspire the global effort to foster CBE planning.

**Tourism human resource needs.** There is an immediate need to determine basic qualifications for LPAs and benchmarks for the skills and knowledge that belie those qualifications. Empowerment of communities depends upon training, qualifying and accrediting citizens in remote destination communities to take on the role of the LPA for CBE development.

Overall, LPAs cannot be expected to adequately and appropriately "inform" and "educate" local citizens through participation — regardless of their particular approach — if they, themselves do not have adequate access to knowledge. Management of CBE knowledge is required to improve access for both LPAs and stakeholder. Free and equitable access to good knowledge is arguably the only effective check and balance between knowledge agents (LPAs and stakeholders), and between processes (direction-
of-decisions and decision-making). In short, active and systematic management of knowledge for planning CBE is needed to:

- prepare local people to take-on the role of LPAs;
- facilitate any/all LPAs to perform to a basic standard in their three key areas of responsibility; and,
- increase access for destination communities at large, to expert knowledge.

Over and above the driving issues, the epistemic consideration of CBE yields a number of insights to a number of related issues. For example, geography seems to pose the major constraints to the access of knowledge for planning CBE, particularly for remote communities. Planning its development in these communities will involve various management functions to deal with the knowledge required by local residents in order to participate in the planning and development processes. However, management activities at this level will typically be *ad hoc* and some management probably occurs tacitly. A failure to effectively manage this knowledge presents significant risks for the well-being of the ecology, the local community and its residents in the cases observed in the Philippines. It severely compromised the participation of many community stakeholders, and thereby, the vitality of communities visions for CBE development. In light of this, donors, funding organizations, and conservation and development agencies should understand and accept that bad ‘ecotourism’ is not only possible, it is probable in the absence of a concerted effort to ensure that local residents have adequate and appropriate knowledge with which to participate in the planning processes. Standardization and certification of this knowledge may contribute greatly to empowering communities to access the knowledge, both through improved identification and recognition of qualifications (i.e., enabling skills, knowledge and competencies), and by improving the efficiency and effectiveness of knowledge flows, globally and within and between remote communities.

### 5.2. RECOMMENDATIONS

Based on the conclusions drawn in this essay, a number of practical recommendations are offered for policy-makers in the agencies that comprise the global effort to foster CBE.
• An independent effort — on the part of individual donors, organizations, and governments that fund conservation and development agencies — is required to hold conservation and development agencies accountable for the development of bad CBE.

• Attention should be focused on ensuring that remote destination communities have appropriate knowledge with which to entertain, participate in, and more importantly, to direct, the CBE planning processes in their own interests, at the very least, through access to fully qualified LPAs.

• Empirical research is needed to explore the specific nature of knowledge involved in the planning and developing CBE, including studies such as detailed task analyses, knowledge elicitation, organizational knowledge audits, knowledge flow and bottleneck analyses, and the mapping of CBE knowledge on the level of multinational agencies and networks. Similarly, the appropriate studies should also be undertaken within individual agencies and organizational networks engaged in destination planning and development.

• Although the choice of agency-level KM solutions would be premature without adequate empirical research, consideration should be given to the feasibility of establishing occupational standards and certifications for LPAs. Such an effort could simultaneously further each of the above recommendations, and initiate a level of KM globally. The notion of communities of practice for LPAs would provide a very clear goal for this effort. And learning networks — that facilitate sharing among the myriads of specialists presently involved in planning CBE — should be considered as a practical strategy to facilitate the establishment and ongoing maintenance and development of those communities of practice.
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OCCUPATIONAL STANDARDS & CERTIFICATIONS IN PLANNING COMMUNITY-BASED ECOTOURISM: TOWARD COMMUNITIES OF PRACTICE

by

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B.A. (honours), University of Manitoba, 1989

Extended Essay
Submitted in partial fulfilment of the requirements for the degree of
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1. Knowledge Management in Planning Community-Based Ecotourism: Toward Community Empowerment
2. Occupational Standards and Certifications in Planning Community-Based Ecotourism: Toward Communities of Practice

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Date Approved: July 23, 2002
Building on the companion paper, this essay puts forth a vision of knowledge management in the global effort to foster community-based ecotourism (CBE). The vision emphasizes communities of practice for the agents that plan CBE. It argues that occupational standards and certifications for these practitioners offer a cost-effective strategy to advance the vision, and, improve access to planning knowledge for remote communities. A synthesis of literature selected from these fields suggests that this vision offers a practical response to the status quo. It concludes that the vision may be advanced in the short-term through the formation of knowledge networks.
CONTENTS

ABBREVIATIONS ........................................................................ VI

1. INTRODUCTION ............................................................................. 1

1.1. THESIS STATEMENT ........................................................................ 1

1.2. RATIONALE .................................................................................. 2

1.2.1. The Need for Research ................................................................. 3

Figure 1.1. Major issues & practical research needs confronting community-based ecotourism ........ 4

1.3. ORGANIZATION OF THE ESSAY ................................................. 5

2. STATUS QUO: COMMUNITY-BASED ECOTOURISM ....................... 7

2.1. KNOWLEDGE AGENTS IN COMMUNITY-BASED ECOTOURISM ........ 7

2.1.1. the Global Effort to Plan Community-based Ecotourism .................. 8

2.1.2. Local Planning Agents ................................................................... 10

2.2. BUSINESS PROCESSES ............................................................... 12

2.3. KNOWLEDGE ASSETS ................................................................... 14

3. A VISION OF KNOWLEDGE MANAGEMENT ................................... 18

3.1. COMMUNITIES OF PRACTICE ....................................................... 18

3.2. COMMUNITIES BEYOND ORGANIZATIONS .................................. 21

3.3. A STRUCTURAL MODEL ................................................................. 22

3.3.1. Domain ..................................................................................... 23

3.3.2. Community ................................................................................ 23

3.3.3. Practice ...................................................................................... 24

3.3.4. Some Practical thoughts ............................................................... 25
4. A STRATEGY FOR KNOWLEDGE MANAGEMENT ........................................ 29

4.1. OCCUPATIONAL STANDARDS & CERTIFICATION ...................................... 30
   4.1.1. Standards ........................................................................ 30

Figure 4.1. Areas of knowledge in tourism education ..................................... 33

4.1.2. Certification .......................................................................... 34

4.1.3. In Support of Communities ...................................................... 36

4.1.4. Answering the Critics .............................................................. 41

4.2. KNOWLEDGE NETWORKS .............................................................. 43

4.3. GETTING STARTED .................................................................. 46

Figure 4.2. A knowledge management strategy for CBE planning ................... 47

5. CONCLUSIONS AND RECOMMENDATIONS ......................................... 49

5.1. CONCLUSIONS ......................................................................... 50

5.2. RECOMMENDATIONS .................................................................. 52

REFERENCES .................................................................................. 53
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBE</td>
<td>Community-Based Ecotourism</td>
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<tr>
<td>KM</td>
<td>Knowledge Management</td>
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<tr>
<td>KN</td>
<td>Knowledge Network</td>
</tr>
<tr>
<td>LPA</td>
<td>Local Planning Agent</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>OSCs</td>
<td>Occupational Standards and Certifications</td>
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<tr>
<td>WWF</td>
<td>World Wildlife Fund (also the Worldwide Fund for Nature)</td>
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1. INTRODUCTION

Knowledge is a construct of the human imagination and is thus bound in space by the location of beings that embody it in their awareness. A geography of knowledge lies therein, resulting in a myriad of challenges implicit in the gaps, which separate those that possess knowledge and those who need or desire it. One such challenge is the quest by remote communities for development that is appropriate in local their environment, economically and ecologically. This quest requires extensive knowledge. A remote community planning ecotourism development is a virtual island in a sea of knowledge. Residents may possess a relative wealth of knowledge based upon their experiences, or they may be impoverished in relation to that possessed by people located beyond their midst. The companion essay, Knowledge Management in Planning Community-based Ecotourism, outlined this situation with some conceptual detail. The overarching challenge is the management of knowledge within and between the global institutions and remote destinations in the effort to foster community-based ecotourism (CBE) around the world. This paper considers how occupational standards and certifications (OSCs), and ultimately, communities of practice may help to overcome this challenge.

1.1. THESIS STATEMENT

The objective of this essay is to put forth a practical vision for improving the current state and management of knowledge in the global effort to foster CBE. The aim is to enhance the ecotourism development literature by introducing a vision of a community of practice for local planning agents (LPAs) who promote and develop CBE. The argument is that OSCs for these practitioners offer a cost-effective strategy to achieve this vision, which would improve access for remote communities to knowledge regarding potential impacts and issues associated with the planning and development of CBE. The premise is that community stakeholders commonly rely upon LPAs (e.g., non-governmental organisations or private consultants) to represent their interests in the ecotourism planning process. Currently, however, there is no clear consensus on the qualifications — i.e., the essential knowledge and enabling skills — required to effectively lead, and/or participate in, planning CBE. Despite the serious consequences of poor planning, LPAs
are entrusted to introduce tourism and develop fragile ecosystems without even essential guidelines or codes of professional practice.

The organization of the paper loosely follows a framework established by the "knowledge management cycle" (Figure 3.3 in the companion paper), which identifies three core activities: conceptualization, reflection and action. Section two proceeds with a broad conceptualization of the status quo global effort to foster CBE. Sections Three and Four reflect on a community of practice to improve the future management of CBE knowledge, which, itself, should be defined by professional OSCs for LPAs. And lastly, Section Five acts upon that future by synthesizing a starting point to initiate those OSCs from relevant models, pioneered by agencies in Canada.

1.2. RATIONALE

Inspiration for this paper draws heavily on the companion essay, including the observations made in the Philippines and of the World Wildlife Fund (WWF) global network. References to the companion paper will be made throughout. In particular, it was recommended in that paper recommended that OSCs be considered in order to define and develop the professional role of LPAs who promote and facilitate community participation in ecotourism development. Such an effort may be the most practical approach to initiate management of CBE knowledge on a global level, and communities of practice for LPAs could be the most appropriate long-term goal in the process. Furthermore, it was argued that knowledge networks — which facilitate knowledge sharing among the myriads of specialists presently involved in planning CBE — are a practical strategy to facilitate the establishment and on-going maintenance and development of those communities of practice. These recommendations are the foundation of a plan for the overall improvement of stakeholder participation in CBE. Yet, further articulation of the strategy options is warranted. These ideas are still relatively new and largely untried in international development assistance. Policy-makers in conservation and development agencies apparently lack the inspiration that has compelled the private sector to recognize the challenges of knowledge management (KM).
1.2.1. THE NEED FOR RESEARCH

Ritchie (1993) systematically constructed an agenda of major issues confronting the tourism sector. Based upon this agenda, Table 1.1 identifies three issues relevant to the planning of CBE, and outlines the related practical research needs. These needs, advocated Ritchie, involve different research approaches, managerial, action, and operational.

Managerial approach: encouraging and facilitating resident responsive tourism. The managerial approach refers to “research related to a specific important problem of limited scope for which management has need of additional information on which to base a decision” (Ritchie, 1993: 205). On the managerial level, the agenda identifies a need to design cost-effective programs that ensure communities have access to appropriate information concerning tourism impacts and issues (see Table 1.1, cell 1A).

Action approach: the north-south gap and related frictions. The action approach refers to “continuous gathering and analysis of research data and the feeding of the findings into the organization in such a manner as to improve its functioning” (Ritchie, 1993: 205). On the action level, the agenda identifies a need to assess the implementation of programs that introduce appropriate technology\(^1\) to the tourism sector in emerging destinations (see Table 1.1, cell 2B).

Operational approach: tourism and its human resource needs. The operational approach refers to “a range of qualitative/analytical techniques designed to formulate and test decision rules which will permit management to optimize the relations between the inputs and outputs of a given operational procedure” (Ritchie, 1993: 205). On the operational level, the agenda identifies a need to determine the specific skills that need to be included in occupational standards that lead to certification (see Table 1.1, cell C3).

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\(^1\) Glaser, et al., (1983) define technology “as more than technique — that is, more than science and engineering. It encompasses the totality of specialized means, including those of management, administration, and public policy, used to develop goods and services for human sustenance and comfort” (p.383). A similarly broad view of the concept is appropriate in present context, and tourism planning models are certainly accommodated within.
### Figure 1.1. Major issues and practical research needs confronting community-based ecotourism

<table>
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<tr>
<th>RESEARCH APPROACH</th>
<th>MAJOR ISSUES &amp; RELATED RESEARCH NEEDS CONFRONTING TOURISM (expected)</th>
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<tbody>
<tr>
<td>(PRACTICAL)</td>
<td>(A) encouraging and facilitating resident responsive tourism</td>
</tr>
<tr>
<td>(1) MANAGERIAL</td>
<td>• Designing cost-effective programmes to provide information to the community concerning tourism impacts and issues</td>
</tr>
<tr>
<td>(2) ACTION</td>
<td>—</td>
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<tr>
<td>(3) OPERATIONAL</td>
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**SOURCE**: adapted from Ritchie (1993).

Occupational standards and certifications for LPAs could contribute significantly to all three research needs. As the community’s primary conduit for knowledge sharing, skills-development, information and technology transfer, the LPA’s role could be strategically improved in terms of both efficiency and effectiveness through the establishment of OSCs and complementary knowledge management initiatives. This can improve community access to knowledge by actively facilitating the sharing of knowledge within and between knowledge generating institutions and remote destination communities, which are the laboratories for innovation. The mechanisms and structures aim specifically to promote and facilitate dialogue within and between the destination communities and international institutions, and thus, overlap with formal and/or informal assessment requirements. Furthermore, establishing OSC and implementing KM directly overlap in their joint need to define enabling skills and elicit requisite knowledge. In this
regard OSCs would effectively constitute an *ontology* that would define knowledge in the domain of CBE. As envisioned by Ritchie (1993) the above issues nest within the policy-level issues and research needs, which drove the companion essay. Thus, the logic in pursuing OSCs rests on the validity of the conclusions of that paper, which advocates a need for empirical research to explore the nature of knowledge involved in planning and developing CBE, moving toward the establishment of a community of practice for LPAs.

### 1.3. ORGANIZATION OF THE ESSAY

The main discussions of this essay are structured in three parts. Section two provides an assessment of practical issues in the *status quo* situation, which must be factored into a KM strategy. The analysis loosely follows a framework of what might be seen as essential 'objects' in a KM situation. The cursory nature of this analysis does not support the development of a specific strategy. Rather, it serves to highlight key issues to consider in selecting a direction for KM in the global effort to plan CBE.

Based upon that direction, section three describes a *vision of knowledge management* that could address many of the *status quo* issues. The vision — communities of practice for LPAs — is outlined as a long-term goal with definite preconditions. This section discusses how their formation will require a body of practitioners with a consensus about what they do and how they should be doing it.

Section four proposes *the strategy for knowledge management* that could move the global effort to plan CBE, from the fragmented *status quo* toward the vision expressed in section three. Occupational standards and certifications are explored here as the foundation for the necessary building of consensus among practitioners. Furthermore, knowledge networks are considered for their potential to initiate a standards development process and coalesce the nascent community of practitioners. While OSCs may appear to be a small part of the overall strategy, arguably they are indispensable in moving the effort toward the vision of communities of practice for LPAs.

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2 "In the knowledge sharing community the term 'ontology' tends to be used more to denote the content of a particular (top-level) knowledge base rather than to indicate a scientific discipline or a methodology" (Gaurino1995: 627).
The final section of the essay presents conclusions and recommendations for practitioners and policy makers based upon the observations and analyses of the three main sections.
2. STATUS QUO: COMMUNITY-BASED ECOTOURISM

This section outlines the premise of this essay. It is structured according to the framework of essential KM objects — knowledge agents, business processes and knowledge assets — and considers the circumstances observed in the case of WWF. This object-oriented framework corresponds to the context level of the CommonKADS model suite (see the companion paper for a detailed explanation). The companion paper attempts to theorize the overall lack of a mindset for the systematic management of this knowledge, particularly in the interest of empowering destination communities. The discussion in this section attempts to flag some specific practical issues to consider in choosing a KM approach to deal with the situation. Although the scope of the project does not permit the full-scale empirical analyses required in developing KM solutions, these issues would arguably be key aspects thereof, and can be considered essential to any further effort in that direction.

2.1. KNOWLEDGE AGENTS IN COMMUNITY-BASED ECOTOURISM

In analyzing the context of a KM situation, the CommonKADS approach suggests both an organizational model and an agent model. They emphasize defining the organizational structure and identifying the people that execute tasks and qualify as agents. These tasks may include the management of the knowledge assets, which are frequently embodied in the agents themselves. Or it may involve some aspect of the business processes of the organization, which are the subject of the KM.

Empirical research to define the role of planning agents would make a major contribution to a discourse on CBE. The companion paper and its conceptual model of CBE planning focused mainly on two types of agents, LPAs and stakeholders. They are seen to be the most directly engaged in the overall planning and development process. The relationship between the entities is believed to be an important focal point here. In terms of knowledge work, LPAs and stakeholder are quite inextricable from the larger

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3 The knowledge engineering orientation of the CommonKADS approach has achieved a rigorous conceptualization of the KM situation, generally. It is adopted here because it is believed to provide the most detailed and rigorous conceptual view.
context: LPAs are often tied firmly to agencies and institutions outside the destination communities and they are believed to be the key source of knowledge for stakeholders in many destination communities. This larger context might be seen as the global effort to foster CBE planning around the world. Local planning agents are perhaps, the immediate concern because of their pivotal role between the global effort and the community stakeholders. Overall, an important emphasis of efforts here might be seen as one of widening and deepening the engagement of agents in the KM process.

2.1.1. THE GLOBAL EFFORT TO PLAN COMMUNITY-BASED ECOTOURISM

Knowledge management work has evolved on the basis of research and development focused on private sector, for-profit operations. More recently, the field of vision has expanded and a number of major KM initiatives are occurring in the public and non-profit sectors (Wenger, et al., 2002; Stein, et al., 2002; Denning and Grieco, 2000). This sectoral distinction underpins unique issues faced in the global effort to foster CBE. A thorny issue of inter-destination and inter-agency competition will be discussed below with business processes. But another concern is the organization of work stemming from organizational objectives and accountability structures, an issue that contributes to the essence of agencies in this global effort.

Not-for-profit conservation and development organizations are key agents, if not as LPAs, then as generators of knowledge, thought leaders, and as promoter-advocates for CBE. Quite simply, the work of these agencies and institutions rarely if ever fits neatly into a definitive authority structure, in a way that even the large, decentralized multinational corporations enjoy. Even when forced to negotiate, businesses’ interests revolve around earning profits for a clear and legally defined shareholder group. In contrast, the conservation and development sector is typically vexed by multiple and frequently competing objectives, and an ambiguous and un-ending spectrum of stakeholders. The private sector has arguably been the more convenient starting point for KM research.

Non-governmental organizations, in particular, display their own unique internal divisiveness over the subject of ecotourism development, stemming from the very nature of their agency. Non-governmental organizations are quite fundamentally, value-driven
enterprises, and ecotourism’s dual imperative of profit and conservation inevitably challenges the core values of large numbers of workers in non-governmental organizations (NGOs), often dividing agencies internally. Furthermore, modern development agencies are typically built on a model of partner-networks. Stein, et al. (2001) have defined a network as:

a spatially diffuse structure, with no rigidly defined boundaries, consisting of several autonomous nodes sharing common values or interests, linked together in interdependent exchange relationships ... emphasizing the repetitive interactions among members, as well as their converging interests. Another distinguishing characteristic of a network is its largely horizontal, rather than hierarchical, structure. It is this absence of hierarchy which gives networks their flexibility, their capacity to expand and contract in response to changing environments, and their potential to adapt (p.5).

In many cases large development agencies are moving toward the “virtual” organization where centralized headquarters are linked to large numbers of geographically dispersed satellite organizations (Peters, 1992). When funding sources are brought into the picture, the authority for particular CBE developments, in practice, commonly stretches well beyond individual organizations. While there are tremendous merits in all this, the process of incorporating new partners often further fragments a network’s value-base, thereby, perpetuating ambivalence over ecotourism. The goal of many NGO networks is to offer partners the benefits of affiliation with the opportunity to maintain significant autonomy. Values in the NGO sector tend to be deeply held, and the scarcity of resources in most networks seriously complicates global efforts at levelling-off on core values and aligning organizational communications, policies and procedures. All of this seriously fragments the lines of accountability and the objectives within the global effort, and particularly in comparison to private sector, for-profit corporations.

An abundance of literature is starting to suggest that the realities of the global effort as laid out above, may in fact, be a double-edged sword that could, ultimately, support KM (Wenger, et al., 2002; Stein, et al., 2002; Denning and Grieco, 2000; McAdam and McCreedy, 2000; Peters, 1992). In particular, the dispensation of hierarchical structures and cultures, and embracement of decentralized, virtualized network structures, is a strategy that is quickly being adopted by leading knowledge-based corporations. This is a structural solution that has been found to alleviate
constraints on dialogue between managers and frontline people (Peters, 1992; Denning and Grieco, 2000). Stein, et al. (1993) observed that dismantling hierarchal structures and reconfiguring organizations as networks “make it easier to encourage a freer flow of new ideas and innovative ideas across national boundaries, across disciplines, and between researchers and practitioner” (p.136). Poon's (1993) vision of building a capacity for continuous innovation helps to put this into perspective:

the biggest constraint to innovation is not the lack of creativity or technology but the absence of social, organizational and management structures that will allow new ideas to take hold ... Players will have to change their organizational forms to accommodate change. ... Firms will need to adopt flatter hierarchies and will have to develop the organizational flexibility to accommodate change (p275).

The situation, however, may not be quite as straightforward as would first appear. It has been stressed that within decentralized, virtual organizations “rapid dissemination of knowledge is often critical” (McAdam and McCreedy, 2000: 161). The present view suggests that while there may be an inherent structural advantage in conservation and development networks, it may be a latent benefit until such time as it is complemented with active and systematic KM efforts. The situation of the WWF global network — in which the international headquarters based in Switzerland has little authoritative rank over its members in the USA and the Philippines — seems to suggest that knowledge bottlenecks are still indeed a serious issue. It suggests that while the organization as a whole is evolving along the ‘network’ model, there is a need for KM to ensure broad knowledge construction, sharing and dissemination. Moreover, without the complementary KM efforts, this advanced organizational structure may actually handicap knowledge-intensive processes such as CBE planning because a traditional authority structure is not there to direct dispersed offices to engage with one another.

2.1.2. LOCAL PLANNING AGENTS

While organizations and agencies represent the management side of the global effort, the LPAs represent the frontline. The companion paper has outlined the role and significance of LPAs in the planning of CBE, and particularly, with respect to the empowerment of
the destination communities (n.b. section 3.4). There are, nevertheless, a couple of outstanding practical to be considered.

Local planning agents are typically private consultants or specialists in conservation and development organizations. The observations in the WWF indicated a reliance on a combination of staff and external consultants, as well as informal private-sector partnerships to provide the knowledge required by stakeholders in the communities of Donsol and Pamilacan Island. An investigation was conducted into the feasibility of contracting a group of experienced international consultants to provide an elementary CBE planning school for 20 people in the Philippines. The costs of a two-week meeting, projected by The International Ecotourism Society, were in excess of US $50,000. Workshop and curriculum design were estimated to be a major component thereof. While this appeared to be a reasonable and fair-market proposal, the fact is that this sort of expertise is simply unaffordable for many of the world’s more promising ecotourism destination communities. The remote location of these destinations, and the tendency of independent consultants toward the reinvention of curricula for basic knowledge and skill components, is believed to be critical factors in the cost structure of the consultant-based knowledge sharing approach.

One salient feature of the status quo of agents is that collectively, the people who currently fill the LPA role in destination communities around the world seem to come from a vast spectrum of academic disciplines and professions. And currently, the private consultants that take on LPA role are not formally organized, for example, through a major professional association or significant umbrella organization dedicated to CBE development. Such a condition may well impose a further constraint on effective KM. Quinn, et al. (1996) point out that “members of every profession tend to look to their peers to determine codes of behavior [sic] and acceptable standards of performance. They often refuse to accept evaluations by those outside their discipline” (p.72). They note further, that this tends to be the case even when a common goal is at stake. The point here is not that diversity is a problem. To the contrary, it may, ultimately, be very beneficial. However, it may conceal an underlying KM constraint. Fragmented identities are the barriers to dialogue, rather than the unique perspectives that each individual brings to the job. Professions and disciplines foster trust among members, which allow them to temporarily suspend their assumptions and listen to colleagues’ opinions.
2.2. BUSINESS PROCESSES

CommonKADS methodology approaches the analysis of business processes based on a synthesis of organizational models and a task model. The thrust is on mapping-out the overall business process of the organization or enterprise. Based on the overall structure, individual tasks are described. Currently, there is no empirical research to define the full scope of processes that may be involved in planning CBE. To complicate matters further, there is evidence of confusion within the tourism industry about the true nature of planning. "What is called planning in the tourism context is, in fact, marketing and promotion" (Pearce and Butler, 1993: 136). The companion paper has proposed that, at a conceptual level, the overall business process would entail all aspects of decision-making and the direction-of-decisions concerning the development of CBE (n.b. section 3.4). This can encompass a wide range of tasks executed by the agents and requiring a vast array of knowledge. Implicit in the direction-of-decisions is the management of the knowledge assets and development of human necessary human resources. This will inevitably involve the participation of the LPAs and quite probably some degree of involvement from their respective organizational and institutional support structures.

If the core business process of planning CBE is represented in the overall decision-making process, then there are arguably significant aspects of the planning practice that are common to most destinations. This does not imply that each destination community is the same and not warranting a situational response. The argument is that much core ecotourism planning knowledge is consistent for most destinations. Knowledge work in other disciplines supports this argument:

In all fields, there is a required baseline of knowledge. One of the primary tasks of a community of practice is to establish this common baseline and standardize what is well understood so that people can focus their creative energies on more advanced issues. Meeting this baseline is essential even to be in the game; you must be on the leading edge to hold a competitive advantage (Wenger, et al., 2002: 11).

The point here, is that reinventing the ‘wheel’ makes for bad economics, and ultimately, would reduce access to the ‘wheel.’ Thus, an important emphasis of KM in the global effort will be fostering broad social construction of knowledge that facilitates innovative
decision-making and situational responsiveness. In light if this, two particular sets of issues arise around business processes in CBE planning: technology and competition.

Technology. Information and communication technology will inevitably play a vital role within the KM process. The vast amounts of data generated in actively cultivating knowledge make technology essential for its reproduction and communication capability. McAdam and McCreedy (2000) point out, however, that while the ‘information processing epistemology’ may show effectiveness in disseminating scientific and technical knowledge in a ‘reified’ universe, it may be inappropriate and much less capable in sharing the wider, socially constructed knowledge-base. They suggest that more organic approaches to KM such as learning networks and communities of practice have emerged to address these shortcomings. The role of technology must also be kept in perspective. McAdam and McCreedy (2000) argue, “technology is simply an enabler” (p.164). The argument is that the role of technology is primarily in integrating KM into organizational change and transformation, particularly in knowledge dissemination. And there are principles to consider in this role (Peters, 1992, in McAdam and McCreedy, 2000):

- Reduce distortion;
- The number of transmissions should ideally be one;
- Everyone has access;
- No geographic boundaries.

Competition. With regard to competition the global effort faces a fundamental challenge. For-profit corporations are guided steadfastly by opportunities for financial gain, and thus, strive fundamental for competitive advantages over other firms. However, the global effort to foster CBE straddles a thorny issue in competition. On one hand, there is a very real necessity for CBE developments to be profitable. At the very least, this inevitably leads to competitive tendencies with other tourism enterprises and possibly even other ecotourism destinations. Considerable research suggests that competitiveness is a driving force behind innovation (Poon, 1993). On the other hand, there is at the very least a strong interest in suppressing competition. This follows from the desire in planning CBE to both minimize environmental impact and spread the benefits of CBE far
and wide: There is an imperative to distribute profits among the community stakeholders and disseminate the seeds of their success to other destinations. Clarity in the imperative for a competitive tourism enterprise is pre-empted by the need for ecological conservation and human development. In the global effort, the relationships between the efforts and objectives are more complicated, and critical feedback loops from performances are less direct when compared to other enterprises. As a result there may be a natural predisposition toward a kind of cognitive dissonance about the LPAs’ core competencies. A clear perspective on the strategic knowledge needs in the planning of CBE could significantly inform the planning process here. Attempts to establish priorities, allocate resources and identify opportunities may carry significant risk of floundering without this insight.

These strategic needs are, in effect, what drive organizations to see specific knowledge as an asset. That is the ability of knowledge to fulfil those strategic needs. The next section will discuss some issues regarding knowledge assets as observed in the global effort.

2.3. KNOWLEDGE ASSETS

In analyzing knowledge assets in a KM situation, CommonKADS suggests employing organizational, task and knowledge models to establish status quo context. The intent is to define the form, nature, time and location of knowledge assets, identify related knowledge bottlenecks, and specify the details. Currently, there is no empirical research to provide such insight in the global effort to foster CBE planning. There is presently no consensus regarding the definition of the task of CBE planning. The domain of knowledge for planning CBE is unwieldy and ill-defined, regardless, whether one looks at it from the perspective of an individual organization or as a global phenomenon.

The observations of the WWF international network provide some insight to the current state and management of knowledge in the global effort. WWF established a network-wide WWF Intranet website that has clearly aspired to information and knowledge management. Within this intranet, the WWF Project Database aims to provide a portfolio of WWF projects around the globe, capturing innovative approaches and lessons-learned. While the Project Database aims to provide a comprehensive listing
of current and closed projects, it was acknowledged that the content was neither current nor complete.

A "Tourism Projects Baseline Inventory" was conducted by e-mail in the month of March 2000. Queries were sent to more than sixty WWF offices (including all national offices, as well as most program offices and affiliate organisations) with the simple request to confirm the existence of tourism-related projects. In total, the listings in the projects database belonged to less than half of all offices queried. A large number of offices failed to respond or confirm involvement in tourism-related activities (33 offices or 50%). This included more than 20 offices with tourism activities listed in the database.

One must question if those offices that failed to respond are completely uninvolved in tourism work, or just failing to communicate their involvement? The preliminary investigations in the Philippines suggest that the later is possible. WWF-Philippines engaged extensively in at least two major community-based, conservation-through-tourism initiatives (i.e., whaleshark interaction projects at Donsol and Pamilacan Island). Neither initiative was reported in the Projects Database nor did the office respond to the inventory. A large number of tourism related activities (partnerships, projects and programs) that exist were not listed in the Projects Database. The inventory confirmed that roughly 65 on-going tourism activities were not listed, representing roughly 50% more than were actually in the database. Collectively, such behaviour leaves much knowledge buried in the network. Thus, a key concern is understanding what specific factors account for the offices failure to report their activities and involvement in tourism development.

The current lines of reporting that existed in the WWF Network may help explain the high levels of non-reported activity. Inquiring into the nature of the Projects Database itself revealed that the Network offices — referred to as "managing locations" in the database context — are not required to input proposals and reports for projects funded exclusively through domestic (e.g. WWF-Philippines) or external (e.g. UNEP) sources. Input to the Projects Database is mandatory only for projects involving funds from the WWF International Program. However, the review of documentation suggests that the International Program currently lacks an explicitly defined program window for funding.
tourism work. One must, therefore, assume that the number of tourism activities funded domestically and/or externally could be significant.

The design of the database had not incorporated a knowledge architecture, relevant to CBE initiatives. A cursory analysis of the database structure revealed only one tourism-specific identifier (i.e. "Eco-tourism development" an "Approach" field). In corresponding with various WWF offices through the course of this inventory, it became obvious that some considerable differences exist in peoples’ individual understandings of the notions of "tourism", "ecotourism," etc. As one example, the role of protected areas and ecotourism is highly significant. However, it was rather ambiguous in the WWF context how individual offices associated the two concepts. While current literature closely connects the two (e.g., Lindberg and Hawkins, 1993), it seems not uncommon for WWF offices to overlook the explicit relationship. Concepts such as "protected areas" are not exclusive to CBE, and are equally relevant to other aspects of the network’s conservation work. Without a shared understanding of key concepts, informed discussion of tourism activities — both in the general sense and in terms of specific undertakings — are difficult and potentially frustrating for all participants.

Overall, at least three conditions appear to beset the global effort in its realization of the asset-value of its knowledge. In particular, it will have to identify and resolve common knowledge bottlenecks such as those that obstruct the sharing and documentation of knowledge, practices, etc. More specifically, however, it will have to address the unique issues within its lines of reporting and accountability, as well as its own lack of shared language and understanding. Only in this way will knowledge take on its full value.

In summary, with assets these three categories — agents, business processes and knowledge assets — are seen to establish the organizational context of KM problems and the corresponding critical success factors for KM solutions. This paper merely offers some thoughts about each category, and in no way fulfils the role of the model suite proposed by the CommonKADS methodology. These discussions do point out some of the unique aspects to be considered in approaching KM in the global effort to foster CBE planning. The present view is that the conditions of the status quo would be better served by a flexible, transformational approach to KM, rather than an object oriented approach.
Recent research and development in the area of communities of practice are believed to hold much potential in this regard.
The previous section conceptualizes, albeit in a cursory way, the current state and management of knowledge in the global effort to foster CBE planning. Building on the theoretical foundation sketched out in the companion paper, the present section establishes a practical direction for KM strategy amidst the realities of the global effort. The argument is that communities of practice for LPAs represent a highly appropriate model for KM strategy in the global effort, given its unique realities, relative to typical applications such as a private enterprise. Communities of practice for LPAs could contribute to the empowerment of communities. Nevertheless, the current state of the CBE domain, the planning practice, and the community of LPAs, makes this unfeasible in the short-term. It is presented here as a goal to guide strategy through the long-term. A specific proposal is beyond the scope of this essay. The section concludes, however, by discussing why there is an immediate need for an incremental approach toward the development of communities of practice for LPAs around the globe.

3.1. COMMUNITIES OF PRACTICE

The theory of "communities of practice" as a KM strategy was co-authored by Etienne Wenger and Jean Lave (1991) in a seminal book on "situated learning." In practice, however, they have existed for centuries. "Communities of practice are groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, et al., 2002: 4) They are defined by "a common disciplinary background, similar work activities and tools, and shared stories, contexts, and values" (Millen, et al., 2002: 69). Tribes, trade guilds, professional associations, clubs, even street gangs, are all seen to embody key aspects of communities of practice as a KM strategy.

So why have communities of practice resurfaced with so much interest now, after so many years of 'common place' existence? It is not their role in managing knowledge that is new, but rather the new demands of organizations for appropriate systems to facilitate the KM process. Recent work in this area has struck a meaningful mental image, with which to embody the essence of managing knowledge in an organizational context.
It has evolved into a metaphor of organizational structure, a “new wave” in organizational design (Wenger, 2000: 5).

As a strategy for KM, communities of practice are not completely dissimilar to the CommonKADS, engineering-driven strategy. The object-oriented approach of the latter has shown success in certain contexts such as manufacturing, where processes, agents and knowledge assets can be delineated with some degree of clarity. However, as section two may suggest, the situation of CBE planning does not resolve in clarity. Knowledge for planning CBE, certainly in the present state of the domain, begs a more organic approach to management — in fact, using this term loosely or perhaps even opting for the “stewarding” of knowledge. Such expertise arguably lives in the human act of knowing, it maybe more tacit than explicit, held socially more frequently than individually, exist dynamically, and may respond to social structures as management tools better than well-engineered instruments.

In short, the value of communities of practice to situations such as CBE is that they themselves can offer a situational responsiveness in their approach to the management of knowledge. They may be particularly appropriate for CBE in that they are not constrained to view knowledge assets as objects. Emphasis on the members of communities rather than objects may offer a better response to tacit knowledge. By providing space for their members — their disagreements and debates too — communities of practice integrate and manifest the social construction of knowledge in recursive interplay between groups and individuals. And therein, they accommodate the dynamism of knowledge, which is as much as part of those members, as it is embodied in their tools, documents, and processes. As a social structure, the community of practice may be an ideal knowledge tool. Management science has discovered over the decades certain social structures within organizations correspond to specific managerial problems. For example, “teams” have proven effective social structures in managing performance and accountability associated with projects. However, Wenger, et al. (2002: 10) suggest that they simply cannot cope with perishability of knowledge, which frequently transcends space-time events. By engaging practitioners in the stewardship of the knowledge that they require, use and create, communities serve as an ever-present social forum to support knowledge as a living process.
Implicit in the notion of communities of practice is the belief that they have, and will continue to occur, naturally, in some capacity. Friends and co-workers will always share experiences, ideas and opinions informally. A key contribution of Wenger, et al. (2002:12) is the argument that organizations must "actively and systematically" cultivate communities of practice in order to maximize their incidence and effectiveness. These points parallel the observations of the field investigation described in the companion paper, which suggested that KM was inevitably occurring at some level, to some degree, but, to mitigate outcomes such as those observed in the Donsol example, deliberate and proactive KM strategy would be required. They argue that cultivation is the appropriate analogy, because the communities' capability for the stewardship of knowledge requires a degree of autonomy and informality:

A plant does its own growing, whether its seed was carefully planted or blown into place by the wind. You cannot pull the stem, or petals to make a plant grow faster or taller. However, you can do much to encourage healthy plants: till the soil, ensure they have enough nutrients, supply water, secure the right amount of sun exposure, and protect them from pests and weeds. There are also a few things we know not to do, like pull up a plant to check if it has good roots (Wenger, et al., 2002:13).

They point out that this cultivation departs from the planning, directing and organizing of more traditional organizational structures. "Cultivation" is a process of eliciting, fostering and negotiating participation, emphasizing the same notion of "community empowerment" that must drive the CBE planning process itself.

The value-adding potential of communities of practice is vast, ranging from short- to long-term benefits, tangibles and intangibles, as well as strategy-making and strategy-implementing value (Wenger, et al., 2002; Millen, et al., 2002; McAdam and McCreedy, 2000). Despite this, the case for communities of practice as an exemplar in the global effort to foster CBE is compelling even on basic KM issues observed in the companion paper:

- Connecting local pockets of expertise with isolated LPAs;
- Diagnosing and relieving planning issues whose root causes cross "team" boundaries;
• Analyzing the knowledge-related issues of uneven performance across organizational units engaging in similar projects, thereby working to bring everyone up to a high standard; and,

• Linking and coordinating unconnected efforts that involve and depend upon the same domains of knowledge.

On top of potential improvements in these areas, communities of practice could uniquely address another key issue observed. The companion paper points to an incongruence between WWF's actions in planning CBE in the Philippines and its official position, or espoused theory. As a strategy, communities of practice differ significantly from other KM approaches by engaging actual practitioners in managing their own knowledge, rather than employing separate knowledge managers. This distinction arguably goes beyond improving efficiency and reducing bureaucracy. Wenger, et al. (2002: 17) suggest that this produces a “double-knit” effect in the organization, arguably manifesting Argyris and Schön’s (1996) “double-loop” theory of organizational learning. And it promises to do this with profound simplicity. Community leaders are peers, rather than bosses. While dedicated knowledge managers may have an appropriate role in some applications, it is argued here that the responsiveness gained through the double-loop learning potential is absolutely appropriate for the global effort to foster CBE. Formal structures for managing accountability for results are allowed to coexist with informal structures based on domains, designed to steward knowledge, competence and innovation. The need for situational responsive in CBE planning (articulated in the companion paper), combined with the challenges of ensuring accountability in a massive and under-funded development assistance bureaucracy around the world, make communities of practice a highly appropriate approach to KM in the present global effort. And the employees may benefit from a new sense of “belonging” in large network organizations. A community of practice would transcend the constant redeployment of staff, offering people a stable group of peers amidst the stream of projects that pass through their careers (Wenger, et al., 2002: 20).

3.2. COMMUNITIES BEYOND ORGANIZATIONS

Wenger, et al. (2002) present a vision of an “extended knowledge system” that transcends the individual organization. This is especially relevant to the global effort to foster CBE
planning. They point to an initiative by the World Bank — which itself, has completely reorganized around the communities of practice model — that established a community of practice for mayors of capital cities in Latin America. The members also head similarly oriented communities of practice for mayors of smaller cities within their own countries. Such a prospect is highly important for a variety of reasons. As discussed in section two, authority for particular CBE developments commonly stretches beyond individual organizations, through partnership-based network structures and trans-organizational funding arrangements. But, more fundamentally, the conservation and development objective of the effort is truly a global interest and should transcend inter-destination and inter-agency competitiveness.

The world has become the ultimate organization, and the challenges that it faces are increasing related to knowledge. The principles that apply to businesses, their markets, and the broader learning systems in which they participate also apply to the challenges faced by our societies. In fact, the socioeconomic requirements for sustained prosperity in a global economy will demand that we apply these principles beyond the private sector (Wenger, et al., 2002: 220).

Their espoused vision is one of “constellations” of communities of practices linking networks of relevant practitioners, including specialists and innovators that can steward disciplines regionally, nationally, or internationally. They suggest that the functioning constellation of “practice-based” communities will complement “place-based” communities in the same way that communities of practice within a business, complement primary organizational structures such as business units and project teams.

3.3. A STRUCTURAL MODEL

Structurally, communities of practice are believed to combine three fundamental elements, a domain of knowledge, a community of people, and the shared practice that is the focus of attention (Wenger, et al., 2002: 27). In this regard, these elements parallel the knowledge assets, agents, and business processes, which constitute KM functions in the CommonKADS approach. Conceptually, however, the latter view is of “objects,” whereas the former equates more with “living” organisms. Their nature offers further insight to the relevance of communities of practice, and a vision of how to foster their growth in the global effort.
3.3.1. DOMAIN

The domain defines a set of issues that form the common ground and sense of identity of the community. Its legitimacy — in the eyes of members, the organization and the world — derives from the detail and integrity of the definition. This affirms the community’s value and purpose to all concerned. Much emphasis is placed on the domain’s role in establishing and maintaining an overarching identity. It is observed that domains are not a fixed set of ideas, but rather are dynamic. The community and members detect their sense of identity as problems resolve, new ones appear and the knowledge evolves. The domain “boundaries” are found therein; knowing the leading edge has proven instrumental in determining what counts and what needs to be shared, and how best to package it. They point out that “it is a lot easier to define a domain when there is already an established discourse, as is the case with a professional discipline” (Wenger, et al., 2002: 30). Without commitment to the definition, the community is simply a group of friends. Sharing a definition of the domain is the basis of members’ accountability to the knowledge and the emergence of a practice. The extent to which the definition intersects with the mission of the organization will determine its weight in influencing strategy, or, on the other hand, its possible marginalization. The corollary is that the community flounders when the definition fails to inspire the members. In perfect balance, the well-defined domain elevates the profile and influence of the community of practice within the organization.

3.3.2. COMMUNITY

The community in this context is something of a virtual space, in that its scope is largely based on the extent to which it engenders feelings of “trust” and “belonging” in its members. These feelings are crucial to the core functions of the community as a knowledge structure: dialogue, interaction and learning. By inspiring, and ultimately, sustaining (or inhibiting) these functions, communities significantly influence the social construction of knowledge. A notion of reciprocity where individuals feel as sense of mutual benefit from participating is seen as indicative of community health. A recursive sharing and confronting of members’ assumptions within the community — a characteristic of dialogue (Denning and Grieco, 2000) — is believed to fashion a social
fabric of learning. Interaction must be regular and meaningful, thereby, requiring costly face-to-face exchanges and activities, in addition to remote communication. The diversity of the members' backgrounds, skills, and points of view, rather than their homogeneity, has proven beneficial for creativity without significant constraints on development or operations. And communities of practice are seen to be quite capable of flexing to accommodate small (less than 15) and large numbers of members, with subgroups (between 50 and 150) and nested sub-communities (more than 150) emerging around individual identities and locales. Governance requirements of communities are also seen as flexible, but with emphasis on an “ecology of leadership” from within, and not necessarily formal or individual in nature. A diversity of leaders may emerge including, “community organizers, experts, and ‘thought leaders,’ pioneers, administrators and boundary spanners” (Wenger, et al., 2002: 36). Passion and enthusiasm are believed to be key in directing a community, where “coercion” is practically unviable.

3.3.3. PRACTICE

The practice in this context is seen as a shared body of knowledge beyond the domain, which delineates the topic area. It is pointed out that within communities of practice there are normally expectations that membership will require a certain level of mastery of “basic knowledge,” in part to ensure members that time will be spent productively.

One of the tasks of a shared practice is to establish a baseline of common knowledge that can be assumed on the part of each full member. This does not mean that all members are cognitive clones. People specialize and develop areas of individual expertise. They may belong to slightly different schools of thought. But they share a basic body of knowledge that creates a common foundation, allowing members to work together effectively (Wenger, et al., 2002: 38).

They liken the situation to making jazz, where a repertoire of basic musical technique is the basis for artful improvisation. The essence of the “practice” is seen as socially defined standards for how things will be done, providing a basis for action and accountability. Standards in this context require some level of codification and documentation, at least for core aspects of the practice and domain. The results of which may yield communities a variety of resources to share internally and/or externally. These resources include, language (ontologies), rules, frameworks, models, methods, techniques, theories,
strategies, heuristics, lessons-learned, cases, stories, and even styles, all of which must be encoded in repositories such as manuals, articles, computerized knowledge bases, websites etc. Communities are vehicles of debate about the practice, and disagreement and conflict can be vital, if nothing else, because that is where practitioners take ownership of the domain. It is, however, considered an on-going process in the life of communities and the standards.

3.3.4. SOME PRACTICAL THOUGHTS

The three elements — domain, community and practice — provide a rough sketch of what communities of practice are, and some reasonable expectations and aspirations for them. Developing a community of practice for LPAs in the global effort to foster CBE will clearly not be a simple process. The domain(s) must be negotiated, but, by whom? Communities of LPAs must first be nurtured. Wenger, et al. (2002) suggest that it is almost inevitable that some form of a practice will emerge if a community engages with a domain in sustained interaction. Proactive measures will be necessary, however, to aid the development and direction of the practice. The fundamental elements provide a framework for developing communities of practice and they have suggested a series of questions that can be both insightful and useful in the implementing knowledge management in the global effort to foster CBE:

Domain ... What topics and issues do we really care about? How is this domain connected to the organization’s strategy? What is in it for us? What are the open questions and the leading edge of our domain? Are we ready to take some leadership in promoting and developing our domain? What kind of influence do we want to have? Addressing these types of questions will help a community develop a shared understanding of its domain, find its legitimacy in the organization, and engage the passion of its members.

Community ... What roles are people going to play? How often will the community meet, and how will members connect on an ongoing basis? What kinds of activities will generate energy and develop trust? How can the community balance the needs of various segments of members? How will members deal with conflict? How will newcomers be introduced into the community? Addressing these types of questions will enable the community to find its specific ways to operate, to build relationships, and to grow.
Practice ... What knowledge to share, develop, document? What kinds of learning activities to organize? How should the knowledge repository be organized to reflect the practice of members and be easily accessible? When should processes be standardized and when are differences appropriate? What development project should the community undertake? Where are sources of knowledge and benchmarks outside the community? These are the kinds of questions that will help a community intentionally become an effective knowledge resource to its members and to other constituencies that may benefit from its expertise (Wenger, et al., 2002: 43-44).

Overall, the theory is that communities of practice are in a sense living beings that are born, grow, and die. In fact, they may be reborn, based on the evolving interrelationship of the domain, community and practice. In keeping with that view, a life cycle has been observed, based on five particular stages in the development of communities of practice: (1) potential, (2) coalescing, (3) maturing, (4) stewardship, and (5) transformation (Wenger, et al., 2002: 69). While this is by no means seen as a definitive developmental path, it is believed to represent a general tendency for many such communities. It serves a framework for understanding their cultivation, and will be insightful in considering the potential application of communities of practice as a knowledge management strategy for the global effort to foster CBE. In particular, it will be critical to consider whether or not the global effort meets the potential conditions for developing a community of practice.

The three core elements outlined above define the essence of a community of practice, and its development life cycle has, therefore, largely been built around them. The development "potential" for a community stems from the interrelationship between these elements. In a sense, communities are conceived in defining the scope of a domain, and in that process, the related dimensions are clarified. As a community grows members identify common knowledge needs, which are debated and negotiated, leading to the establishment of a practice. The overall thrust of the first stage of development is seen as the emergence of a group identity, which depends on the dynamics of this process and the swell of energy and enthusiasm it generates.

Unlike task-oriented teams, which can be pulled together and chartered with a predefined goal, communities of practice must grow organically as their learning unfolds. They are dynamic by definition. They will only
work if people identify with the enterprise and the learning agenda that the community pursues (Wenger, 2000: 9).

In view of the present analysis (including the companion paper), the domain of CBE appears so fragmented that it probably does not even qualify as an amalgam. And on top of that, the role of the “LPA” is not even recognized within the agencies that constitute the global effort. The WWF global network, for example, had not even a specific description of the job associated with the planning and facilitation of CBE. Without even basic clarity and cohesion in the first two elements there is no sense of “practice” in the third element. The conclusion here, is that preliminary, catalytic efforts would first be required to move the global effort toward some consensus about what effective CBE planning requires and the role of agents therein. The proposal is that a program to development OSCs could provide such a catalyst, particularly if supported by a knowledge network focused on CBE planning.

The downside. While communities of practice may offer a practical strategy for the management of knowledge in a unique field such as CBE, they are definitely not a simple solution to any KM problems. The analogy with our understanding of conventional place-based ‘communities’ may conjure up notions of friendliness, holism, organics, common-sense development, etc., all of which mask infinite complexity. Communities of practice are by no means a panacea for knowledge troubles, and carry inherent limitations and weaknesses, and are predisposed to a variety of disorders that may also parallel those that beset social dynamics in place-based communities. Wenger, et al. (2002) point out that “the very qualities that make a community an ideal structure for learning — a shared perspective on a domain, trust, a communal identity, long-standing relationships, an established practice — are the same qualities that can hold it hostage to its history and its achievements” (p.141). Much of the vulnerability to disorder is seen to arise from difficulties in the interrelation of the three core elements, as a result of their being ill-defined, or dysfunctional. And because communities of practice typically involve organizations (either exclusively or by cutting across them), many of these challenges are at risk of confounding in the multiple structures that evolve.

On-going reflection, stewardship and nurturing are clearly emphasized and must be factored into an overall strategy for communities of practice. Many of these disorders
are considered inevitable. And in-keeping with the larger analogy, attempts at their outright elimination would be seen more as a form of denial than a practical solution. In fact, the solution is found in learning to recognize, and overcome them. In this sense, the weaknesses and disorder serve to point out the real benefits of the model as a KM strategy. The point is that these conditions are quite typically the core of the KM problem and will have to be overcome sooner or later, regardless of the strategy employed.

Building on this discussion of communities of practice as a KM strategy, the following section will outline a possible strategic approach to move the global effort in this direction.
This paper has discussed the status quo effort, currently fostering CBE around the globe. It has suggested a particular alignment of that effort with a vision of knowledge sharing and generating communities of practice. If the vision of LPAs organized in a global network of communities of practice seems compelling then there is a need to consider the gap in the strategic response of the global effort. Given the present realities, what separates the global effort from that vision of broad social construction and sharing of knowledge. This section considers that gap and points to a strategic response that could realize the vision through practical and incremental developments. In particular, it considers how occupational standards for planning CBE would facilitating the flow and transfer of knowledge within and between remote communities. That is directly through certification of LPAs and indirectly by supporting the establishment of communities of practice. And, the section considers how learning networks — and in the short- to medium-term, specifically, knowledge networks — could contribute to the advancement of both OSCs and communities of practice.

Closing the gap. The gap between the status quo and vision lies in the very foundations of the communities, or the lack thereof. If communities of practice are a practical format for the management of CBE knowledge within and between remote communities, then substantial efforts will be required with a long-term view on the three core elements, community, practice and domain. Presently, there is a serious lack of identity as a community of practitioners. This is, in part, due to the insular nature of the professions and academic disciplines currently participating in the global effort, and rifts with others that should be participating, but currently are not. This identity needs to be found immediately, if there is to be any real progress on the two critical fronts that Wenger, et al. (2002) have considered the most fundamental: (1) defining where the boundaries of the domain(s) of knowledge currently lie; and, (2) building consensus about what the practice of CBE planning is all about. While this may at first seem like a ‘chicken-egg’ dilemma, the need for broad-based knowledge sharing underscores the importance of assembling a community first. The present view is that these fundamentals will only emerge along side a particularly broad and well-informed discourse. The ‘community’ is the most conducive forum in that regard. The following sections will,
respectively, discuss the potential contributions of OSCs and knowledge networks (KN) toward closing this gap.

4.1. OCCUPATIONAL STANDARDS & CERTIFICATION

Occupational standards and certification refer to two separate, but interlocking concepts. The Government of Canada has defined occupational “standards” as “the benchmarks against which occupations and/or people in those occupations are measured” (Price Waterhouse, 1993: 5). Occupational “certification” in this sense refers to the formal recognition — say through the issuance of documentation — of a person’s skills, knowledge, abilities, work experience, and/or performance. In both, reference is to an “occupation” or a range of related jobs (i.e., distinct collections of tasks), rather than any single job. The scope of this paper does not permit any formal proposal or technical guidance in this area. OSCs are considered here for their possible strategic value in addressing some of the unique conditions of the global effort in order to facilitate knowledge management in CBE. In this respect, the interest is the definition and ongoing maintenance of a role for planning agents in the development process.

4.1.1. STANDARDS

Occupational standards encompass a wide range of possibilities and may be practically configured to reflect very unique situations and work contexts. There are considerable ‘control levers’ available and standards do not dictate a “one size fits all” philosophy. In practice, types of occupational standards are designed on the basis of a combination of several key criteria:

- Their focus;
- The groups or body responsible for setting and maintaining them;
- The scope of coverage of the occupation, in terms of specific jobs and the level of detail specified to particular tasks;
- Jurisdiction(s) in which the standards will be used; and,
- The uses to which the standards are applied (Price Waterhouse, 1993: 5).
The focus of standards is particularly essential, in that it outlines three interrelated core dimensions: inputs, processes and outputs. Inputs, in this context, refer to the specific enabling skills and knowledge, and competencies that one brings to a job. The process dimension refers to the work processes and the specific task therein. And the outputs refer to quality of performance, in terms of the quality and/or volume of goods and services that people produce. They could be seen as a simple equation like:

\[ \text{inputs} + \text{processes} = \text{outputs} \]

Most important here, is that standards are normally based upon the one of three dimensions that is most appropriate in relation to the context and the other criteria for the standards.

In the global effort to foster community-based ecotourism, occupational standards for LPAs would, arguably be most appropriate if based upon inputs. The argument is for standards based upon enabling skills, knowledge and core competencies, perhaps in the form of education, academic requirements and experience. The emphasis would be on setting a minimum requirement to be obtained before someone is considered eligible to take on the role of a LPA and oversee a CBE planning process. The logic of focusing on inputs, in part, is that in relation to any specification of either specific tasks or performances, input standards would ensure maximum flexibility in the situational response to destinations, on the part of the planner. And there is a strong precedent for this approach. “Knowledge-based occupations in fields such as accounting, medicine and engineering, where specific tasks are not as easily described, tend to have input, that is, skill and knowledge, standards” (Price Waterhouse, 1993: 7). Generally, they would imply that LPAs possess the capacity for the planning task.

The issue of who would set and/or maintain occupational standards for LPAs is bound to be contentious. Many of the same issues surrounding the question of “Who should plan CBE?” also apply here. At this stage in the debate it may be sufficient to point out that standards development requires a long process and there is potential for negotiation throughout. In fact, the process is probably similar to the planning of CBE itself, in terms of the need for broad and meaningful participation of the stakeholders in the interest of sustainability. Moreover, that process, like the planning CBE will benefit from a broad social construction of knowledge and its resulting innovation potential. The
issue of the scope of the standards will similarly be resolved through this process, once stakeholder reach a consensus to take such action.

The issue of jurisdiction refers to the scale and geography to which the occupational standards apply. A variety of legal and political questions would arise, which could not practically be sorted out at this stage in the debate. Again, it argued here that, there is huge scope for the stakeholders to negotiate practical solutions to these questions if and when the will to act is found. This could include very localized standards adopted by a municipal governments or a group of communities in a particular river delta, for example, all the way to a complex international framework administered through an institution such as the United Nations. The scope for regulatory instruments is limited only by the imaginations of the participants in the debate. The key to a workable solution is innovation.

Occupational standards may be developed with a number of different applications in mind. The argument here is that occupational standards for LPAs would be constructive in at least three particular categories of application: training and development, job descriptions and certification.

Training and Development. Occupational standards could greatly facilitate the development of skilled and trained LPAs. They are an instrument for the assessment of training needs for individuals or groups. Standards provide guidance and inspiration for teaching and training institutions in the development and alignment of program and course offerings. In this regard, CBE arguably suffers from the same, largely *ad hoc* approach to human resource development that afflicts the larger tourism industry. This has been a subject of recent empirical study and considered a serious obstacle to progressive new directions in development:

All too often, tourism education and training have been the result of the inertia of the establishments concerned or an *ad hoc* response to the particular needs of tourism businesses or regions. ... Tourism education and training must attain standards of *quality* (responding to the real needs of the tourism industry) and *efficiency* (researching and weighing up the costs-benefits of the universe of possible education processes and methods) ... The greatest challenge for tourism education and training therefore lies in constructing an educational system which avoids falling into the trap of tackling issues in an isolated, fragmentary way, dependent on the academic origin of the researcher/educator, and which,
instead, creates a corpus of plural, interdisciplinary knowledge, combined to form a united perspective (Cooper, et al., 1997: 12 & 16).

This may be particularly complicated in the case of CBE where planners are frequently required to straddle a vast range of knowledge, individually, so as to steward the ‘big picture’ view of the development. Figure 4.1 illustrates the breadth of knowledge straddled by the tourism industry, generally. CBE encompasses most of the areas represented. Nevertheless, well-conceived standards for planning CBE can begin to forge a united perspective for LPAs.

![Figure 4.1. Areas of knowledge in tourism education](image)

An illustration of the breadth of knowledge related to tourism planning and development. (Adapted from Jafar Jafari, 1981, in Cooper, et al., 1997: 17)

**Job Description.** The published standards documents can effectively serve as a checklist used in developing job descriptions, say, for consulting firms, NGOs or individual destination communities that may wish to secure the services of a LPA. This application may be especially relevant in destination communities where local administrations lack knowledge and resources.

While human resource theory would suggest that employers should focus on describing the actual content of the job at hand, many small employers have difficulty articulating the scope of a job. They find that
tools such as an occupational analysis help them in determining what they want (Price Waterhouse, 1993: 10).

In fact, the difficulty arises because many of the destination communities and NGOs whom have trouble articulating what they “want,” probably have no idea of what they “need” in terms of securing an appropriate LPA.

Certification. Occupational standards would provide a basis for assessing the knowledge, skills and competencies of people who wish to taken on the role of the LPAs. People that meet the standards are deemed to be qualified, and can thus receive certification. Toward this end, the standards could be used to accredit particular educational programs that fulfil the designated skills, knowledge and competencies. They would also provide a basis for prior learning assessments that would evaluate skills, knowledge and competencies that people have already acquired, which may fulfil the requirement sought in the standards.

Although the development of occupational standards does not require development of a certification program, the two initiatives are highly complementary. The following section will therefore discuss certification in further detail.

4.1.2. CERTIFICATION

Standards and certifications are bridged together by the training and experience of individuals. Certificates are issued in recognition of one’s demonstration of the skills and knowledge specified by the standards. In this sense, “certificates” differ from a nominal use of the term by various training institutions to denote a diploma. In fact, there are various categories of certification based upon the standards benchmarking approach, including, licensure, reserved title, vocational qualifications, training certificates, etc. (Price Waterhouse, 1993: 28). While any certification holds the potential to contribute value on a number of levels, the value of all certificates depend on the rigor of the occupational standards upon which they are based, and the subsequent evaluation thereof.

The present view suggests that the reserved title would be the optimal objective for certification of the planners of CBE. This option implies an exclusive right of use on a designated title, say, for example, “certified local planning agent,” based upon an official
regulatory body certifying that one’s qualifications satisfy a designated standard. The chartered accountants’ “CA” designation is one such example with an international presence. The reserved title is commonly supported through a professional or trade association, which prescribes a mandatory code of practice for members. This approach does require considerable and on-going efforts by the regulator to demonstrate and promote the quality of the certification. However, it is arguably a good balance between professional rigor and practicality. Attempting to implement and enforce licensing of LPAs — the more stringent certification option — in the global effort would be practically unfeasible in the foreseeable future. Other certification options may carry insufficient weight within and between the remote destination communities of the world.

In terms of the practicality of certification as a strategy for the professional development of LPAs, it must again be emphasized that the scope for negotiation of particulars is vast. Specifically, it should be emphasized that the present view of certification does not imply the dissolution of any other existing profession or discipline to make way for LPAs. Nor, does it imply that one would have to give-up affiliations with other professional bodies. The certification of LPAs might, in fact, amount to more of a specialization in CBE planning, in coordination with other kinds of qualifications. Creativity will also be required in funding this initiative. One approach to securing international funding for the establishment of the accreditation and certification program might be on the basis of a cost-recovery model for long-term organizational sustainability. In keeping with this approach, subsidies for the training and certification of practitioners and organizations with demonstrated need would be an appropriate strategy for international assistance in support of CBE development. The potential for a ‘win-win’ model of OSCs in this sense is very real for both the certifiers and the range of stakeholders. This includes the scope and jurisdiction of the certification(s), as well as the process of design. The development process should again be inclusive with an emphasis of overcoming challenges through innovation.

Occupational standards and certifications offer many benefits, and contribute value to many different interests, on many levels. The scope and purpose of the present discussion, however, emphasizes a global effort to foster CBE, potential communities of practice for LPAs, and especially, stakeholders in the destination communities. The discussion turns then to some of the potential contributions.
The central argument of this paper is that OSCs could directly support both communities of practice for LPAs, and the empowerment of destination communities. Regarding community empowerment, this support is over and above the indirect contributions that will stem from the establishment of communities of practice, as discussed in section three. In effect, empowerment would benefit from the development of both OSCs and communities of practice, individually, and, in combination. This section articulates this argument. In fact, the case OSCs for planners could include a range of other benefits too, such as career development and employment security for practitioners, improving the overall competitive position of ecotourism as a segment in the global tourism industry, making conservation and development charities more accountable and transparent for public sponsors, etc. Each of these is important and potentially meaningful in uniting the coalition of stakeholders that will be needed to take action. Nevertheless, the present scope concentrates on the perspectives of the communities.

**Destination communities.** Destination communities stand to benefit from an OSCs initiative in at least two ways: (1) By assuring and protecting their ecological and socio-economic health, safety and security; and (2) By developing and maintaining new pools of CBE planning expertise national and regionally, if not locally.

_Ecological and socio-economic health, safety and security._ Planning CBE poorly has serious consequences for the ecological and socio-economic well being of the destination communities. Life in these communities often survives in a delicate balance, and reversing poorly planned development may be next to impossible. Service fields such as accounting, investment banking, certain engineering fields, etc., may have little direct impact on physical health of people, and yet they are governed by OSCs because of the potential to harm the society at large. Standards ensure that training purveyors deliver training that is appropriate for the needs and interests of the industry, sector and/or professions, and ultimately, the needs of the consumers of those services. They articulate explicit requirements for vocational and professional schools. Accrediting schools that meet those standards would not only add value to their educational programming, it would help to ensure that the people who provide CBE planning are actually qualified to do so. The argument is that if services are not properly provided, ecological and socio-
economic health, safety, and security could seriously be jeopardized (Price Waterhouse, 1993: 31).

“Licensure” is commonly the type of certification used to assure and protect the public’s direct health, safety and security (e.g. medical doctors, dentists, etc.). But, as LPAs do not normally have a direct physical impact on people, the more flexible “reserve title” certification is seen as appropriate. While a “reserved title” certification would not prevent non-qualified practitioners from planning CBE to the degree that “licensure” could, the rationale is equally valid. “The user of the services is not in a position to judge the qualifications of the service provider and is thus faced with uncertainty in choosing a seller. ... Certification is justified on the basis of ensuring that people working in an occupation are trained to provide competent and quality services” (Price Waterhouse, 1993: 32).

Furthermore, OSCs can make the verification of practitioner qualifications more efficient and more effective, by providing a proxy for the knowledge, skills and competencies that the certificate represents. This benefits communities by providing a clear and straightforward means by which community stakeholders can ensure that they are getting the appropriate expertise for their situation. In this sense, standards could be structured to include optional components to supplement a basic CBE planning requirement, say for example, for planning marine protected areas, arctic ecotourism ventures, or other areas of specialty. This can improve community access to expertise by systematizing the selection of LPAs. Ultimately, this may avert the scenario where destination communities are duped into arrangements with consultants due to their lack of a ‘big-picture’ understanding, and/or the nepotism within the power structures of the community or a conservation and development agency.

Pools of expertise. Because there is currently no real collective of organization among people who are now out planning CBE around the world, it is difficult to know how many exist in total. And indeed, it may be harder still to know how many could be considered “qualified” for the job. What is clear, just from observing activities in the global effort — the programming of NGOs, and international fora events such as the recent World Ecotourism Summit — is that the pools of planning expertise accessible to destination communities, regionally and nationally, are inadequate. The use of external
consultants is a common practice (Epler Wood, 1998a). OSCs for planners would support the growth of the pools of planning expertise. Practitioners generally “consider that their own skills development helps ensure their employment security” (Price Waterhouse, 1993: 12). Nevertheless, encouraging would-be planners to enter the field is only one of the potential contributions of OSCs.

Training professional staff is an expensive proposition, regardless of one’s aims and objectives. So, if there is a need to train a numbers of practitioners in different parts of the world, one should reasonably ask if standardized training would be less costly in the long-run than non-standardized training. In short, “Does it cost less in the long-run to train people if the skills and knowledge of the job have been standardized?” Empirical research is lacking to document the savings that could be obtained through the use of standardized training compared to other local approaches, whether systematic or ad hoc. However, Human Resources Development Canada — an international leader in this field — suggests that OSCs are probably more cost-effective than ad hoc training:

A rationale could be constructed by examining the costs of curriculum or course development including the costs of occupational or task analysis and then multiplying by the number of jurisdictions which might be assumed to conduct this type of work. In our programs, we have made the assumption that there are savings to be obtained for course developers by avoidance of duplication of effort. There are also assumed benefits for trainees and employers in view of the fact that the training is consistent with a standard (occupational or task analysis endorsed by industry). It would therefore be expected to produce learning outcomes required by individuals and employers. (personal communication with Ian McRae, OSCs specialist with HRDC, April 2002).

The knowledge and skills that practitioners require may, in fact, vary somewhat from one destination to the next. Thus, it may be necessary to distinguish between skills and knowledge that are appropriate for standardization and those that are not. The standards development process can rigorously distinguish that fact. Those aspects deemed appropriate for standardization should logically be delivered more efficiently than those that are not standardized. By improving the cost-effectiveness of training for LPAs, standards and certifications can make the required knowledge and information more accessible to the destination communities than it is currently, with ad hoc training.
Communities of practice. In addition to empowering destinations, OSCs could support the early stages of development in communities of practice for LPAs (i.e., Stage 1: Potential, and Stage 2: Coalescing). In this regard the process would contribute and perhaps overlap completely with the core dimensions: (1) Fostering a community of planners; (2) detecting the engaging issues that define the domain (its boundaries at the very least); and, (3) identifying the common knowledge needed in the tasks that make up the planning practice.

In this regard it is helpful to first consider what the development of OSCs entails. Human Resources Development Canada (2000) has published a five-stage, multi-step model of the OSC development process:

Planning the Process:
- Planning for standards development;
- Selecting an occupational analysis facilitator;
- Selecting industry participants for the occupational analysis workshops.

Producing the Standards:
- Preparing for the occupational analysis workshop;
- Conducting the occupational analysis workshop;
- Drafting and translation of the analysis;
- Validating the occupational analysis;
- Finalization and acceptance of the standards;
- Printing and distribution of the standards.

Establishing Approved Training Programs:
- Developing a curriculum and training programs;
- Delivering the training.

Certifying and Accrediting:
- Accrediting the training programs;
- Assessment and certification of individuals.

Continuous Improvement Loop:
- Monitoring and measuring effectiveness;
- Improving processes.

4 Emphasis here is on the knowledge common to everyone who performs a given task, rather than just the knowledge common to all tasks.
Fostering a community. Defining the domain and identifying the baseline knowledge requires the participation of a core group of planners presently engaged in the global effort. In this regard, phase one, Planning the Process overlaps significantly with finding people already engaged in networking related to planning CBE. In particular, this could see the identification of a potential community coordinator and thought leaders, crucial steps in establishing a community of practice for CBE planners. Furthermore, the process would inevitably include interviewing potential community members, and begin connecting them through the OSC development process and related communications. These are considered formative steps toward the social construction of the community of practice.

Scale is implicit in the notion of communities of practice, and OSCs support their development at several scales. A community of practice may, for example, be initiated within an organization, such as the WWF network. Or, even within one of its members, through an internal organization-level OSC development initiative. Alternatively, an independent community could be pursued through the development of OSCs at a regional or international level, for instance, through an independent organization such as The International Ecotourism Society. An advantage of a more independent, multinational approach is that the OSC and communities of practice could be more broad-based, and thus, further advance the professionalization of local planning agents.

“Professions are essential in the long run to production, since they provide and foster the skills necessary to improve its efficiency,” and in this regard, there may be four “surface features” to distinguish them from other vocations: “(a) acquisition of learning as a requirement for entry; (b) a presumption of learning in practice; (c) self-education, and control over the pace and scheduling of work; (d) the possibility of advancement, from level to level, within the profession” (Scruton, 1983: 379). While OSCs manifest all of these features to some extent, they quite effectively constitute the first feature. Thus, establishing OSCs would arguably advance the professionalization of CBE planning and the efficiency of the global planning effort. Furthermore, as indicated above, the domain of knowledge in communities of practice will emerge more easily where there is already a profession in existence (Wenger, et al., 2002). And this benefit comes over and above the sense of the shared identity in most professions, which is also highly conducive to community formation.
Defining the domain and identifying baseline knowledge. These two dimensions would be practically advanced together, as a part of Phase 2: Producing the Standards. Conducting the analysis would involve applying skills and knowledge (input) methodologies such as “information-processing analysis” and “learning hierarchy analysis” (Price Waterhouse, 1993: 14-15). The former method would reveal the operations and decision-making processes needed to accomplish the planning task, and outline the thought processes of someone who completes it effectively. The latter method would identify the specific skills and knowledge required to effectively design and lead a CBE planning process. This phase would, effectively establish the baseline knowledge required in the practice and scope out the boundaries of CBE knowledge.

If the processes for developing communities of practice (outlined in section three) and developing OSCs are compared, the first two phases of each process overlap considerably. If communities of practice are considered an appropriate knowledge management strategy for planning CBE, then occupational standards and certifications are an important part of that strategy. Integrating the development processes could result in great economic efficiency. Moreover, it could bring focus to the initiation of the KM strategy in the incubation and delivery of immediate value for the disparate professionals and academics in the role of LPA.

4.1.4. ANSWERING THE CRITICS

OSCs must meet the needs of both the supply- and demand-sides of the labour market. So the construction of standards and certification systems invariably presents a number of issues and concerns that must be taken seriously. Human Resources Development Canada has outlined a list of these issues (Price Waterhouse, 1993), and indeed a number of them would need to be addressed in the case for standards and certifications for LPAs. For example, some key issues would likely include concerns over:

- The reliability and validity of standards;
- Variability in jobs and work contexts;
- Who should set the standards;
- The breadth of the occupation defined by the standards;
The diversity of organizational cultures in the global effort; and,

- Jurisdictional boundaries and the recognition of certifications.

Considering all of these concerns is indeed outside the present scope. However, a common criticism of the argument for standards and certifications for LPAs may be concern regarding the variability of jobs and work contexts. Specifically, there may be a perception that it is inappropriate to standardize something as ‘local’ as the knowledge for planning CBE. Clearly, these concerns cannot be brushed aside. Defining the scope of the LPAs’ role in a way that all stakeholders can recognize and accept will be a serious challenge. Success will depend on the propensity of the parities to develop and accept a common standard. Inevitably this will be advanced through their sharing of a community identity, as well as their broad sharing of knowledge. Furthermore, the geographical dispersion of the LPA’s tasks will be a key factor in shaping those challenges, since the tasks and the contexts of the job will vary accordingly.

Such criticism is somewhat ironic, however, as it may well be the management of CBE planning knowledge that facilitates innovation that will, ultimately, allow these planning processes to respond to unique situations in destination communities. The companion paper effectively answered this criticism by illustrating the role of KM in generating innovation at the community level, through the broad, social construction of knowledge in the participation of the stakeholders. On that basis, this paper has simply shown how OSCs are instrumental in bringing about a KM strategy focused on communities of practice. The innovations needed to meet the challenges of developing OSCs and communities of practice may require further interim support.

Responding to these concerns will require careful consideration by the, disparate groups of stakeholders in the global effort. The idea of knowledge networks could initiate the knowledge sharing and bonding processes that would inform such concerns. The following section will briefly comment on the potential role and contribution of KNs to the establishment of standards and certifications and communities of practice.
4.2. KNOWLEDGE NETWORKS

Learning networks, and more specifically, knowledge networks could potentially play an important role in negotiating issues in the development of OSCs and in coalescing communities of practice. Harasim, et al. (1995) in their technology-centred view see these networks as particular “educational applications” of computer mediated communication networks, bound together by the idea of common “learning communities” that form among network users. The diversity of those communities, in terms of both disciplines and sectors is a defining element of these networks. In fact, there is a lack of clarity in these concepts in relation to the KM context (e.g., Harasim, et al., 1995; McAdam and McCreedy, 2000, and Hiltz and Turoff, 2002). Learning networks build on traditional structured learning situations by overcoming the dispersion of learners, both geographically and philosophically. They vary in the degree to which they substitute for the face-to-face assembly of the participants. “Almost by definition, all knowledge networks are learning networks, but not all learning networks are knowledge networks. Knowledge networks connect ‘experts,’ with the explicit purpose of generating, producing, and sharing knowledge” (personal communication with Janice Stein, June, 2002).

The analysis by Stein, et al. (2001) supports a view that information technology is not, in fact, the essence of KM, but merely an enabler (Denning and Grieco, 2000; McAdam and McCreedy, 2000). Technology by itself accomplishes nothing. Face-to-face interaction continues to play an important role in establishing the trust and inspiration among people, which motivates their participation in these networks (Denning and Grieco, 2000: 1875; Stein, et al., 2001; Wenger, et al., 2002).

The main argument here is that if professionalization is conducive to the formation of communities of practice, then knowledge networks are a catalyst to get things rolling. Specifically, they are a strategy to coalesce groups of diverse professions and disciplines presently engaged in planning CBE, and, to explore the important and heartfelt issues facing them currently. Their role may not be entirely tangible. The network can bring people to see the common interest in their own issues. This precipitates sharing the domain, and the need for systematic interaction is logically found therein. Wenger, et al. (2002) suggests that a potential community of practice is like an
Embryo, in that it “already comprises some basic elements of a developed community and has the full potential to become one” (p. 71).

Stein, et al. (2001) define *knowledge networks* as “spatially diffuse structures, often aggregations of individuals and organizations, linked together by shared interest in and concern about a puzzling problem.” They maintain that the primary mandate of knowledge networks is the creation and dissemination of knowledge, and argue that their contribution to innovation and international learning on three major points, interdisciplinarity, operationality and contextualization:

- Broadening knowledge construction by engaging multiple disciplines in research that is contextualized in local experience while accruing across international boundaries;
- Deepening knowledge construction with ‘operational’ knowledge constructed through the interaction of multiple sectors of expertise within a particular context; and,
- Invoking social interaction in the knowledge construction and dissemination processes, by blurring the researcher-participant interface such “that ‘global’ knowledge is introduced locally and that ‘local’ knowledge shapes and, at times, redefines global knowledge” (p. 4).

Knowledge networks enlarge the sources of to knowledge include that which may otherwise be missed. They also reframe agendas to respond to a broader — and possibly, more appropriate — range of needs and expertise, and disseminate research findings. Stein, et al. (2001) argue in their analysis that there is evidence that knowledge networks are facilitating the wider knowledge construction across disciplinary boundaries that leads to innovation. And they conclude that this knowledge sharing and construction that occurred in networks they observed, led to the empowerment individuals: “Partly as a result of this increased status, members also gained better access to their own governments and, in some but not all cases, were able to press effectively for increased consultation and a more transparent process” (Stein, et al., 2001: 46).

In short, the emphasis in KN is clearly on knowledge exchange and sharing and not one-way knowledge broadcasting. And the key to their success, in this regard, seems to be disengagement from hierarchical structures and a corresponding enhancement of potential for horizontal rather than vertical knowledge flows. Nevertheless, there is
recognition that this raises important questions: "We have little systematic evidence about how knowledge networks ... begin and about the processes that define these networks" (Stein, et al., 2001: 6). Nevertheless, they emphasize that KNs are not intended to be sustainable for ever. In a review of five international KNs, their management appears to be an essential aspect of effective knowledge sharing:

Leaders must 'manage' the network's business, 'steer' the development of the network, and coordinate its activities. The business of the network must get done: meetings organized, research monitored, and funding secured (Stein, et al., 2001: 45).

Quinn, et al. (1996) referred to KNs as a "spiders web" that can quickly bring together a team of experts to solve a problem and then disband. They point out that there is no single "best way" to manage networks because of their inherent uniqueness. Furthermore, they suggest successful use of intellectual webs in the private sector has come with incentives for the sharing of knowledge and corresponding disincentives for hoarding. Employees' compensation is linked to their mosaic of peer relationships. Information and communication technology is also seen as a key in leveraging the potential of networks, in that it allows a significantly broader diversity of talents — in terms of both experience and geography — to be brought to bear on a single project.

Furthermore, one of the most problematic aspects of KNs is the maintenance of a good communication system within and between the various levels of participants.

Global knowledge networks create and transfer knowledge — scientific, community-based, and policy-relevant — as well as the necessary hardware and finances to support knowledge acquisition and implementation. This transfer between scientific knowledge is a process of 'social learning.' Such networks operate within a globally shared system of knowledge creation and transmission, while the practices of individual members are informed by the histories, politics, and ecologies of the national and local places in which they work; in this sense, global knowledge networks link the global, the national, and the local (Stein, et al., 2001: 7).

To put this into perspective, knowledge networks could be a major complement to OSCs and communities of practice for LPAs. Although, KNs and communities of practice are both essentially network structures, the literature suggests that they differ from each other in at least two respects: (1) KNs are able to straddle relatively broad
practical and philosophical divisions in their membership, while communities of practice form and function effectively based on a sharing of identity (McAdam and McCreedy, 2000); and, (2) perhaps because of this, KNs seem to require greater and more explicit management (Stein, et al., 2001) than communities of practice, which benefit from a minimal, ‘light-handed’ management touch (Wenger, et al., 2002). The present view suggests that KNs are a practical means to initiate knowledge management based on communities of practice in the global effort to foster CBE. This is the final subject of discussion in this section.

4.3. GETTING STARTED

Previous sections aim to rationalize for stakeholders in the global effort, a strategy that strives to establish communities of practice for LPAs to address the management of CBE knowledge within and between institutions and destination communities. Section four has argued thus far, that OSCs are a necessary organizational requirement for these communities of practice, and that knowledge networks may be the most appropriate starting point in the strategy. Figure 4.2 illustrates the overall strategy proposed by this paper including the status quo, the vision and the strategy. It puts into perspective the relationship between knowledge networks, communities of practice and OSCs. This relationship involves an undetermined population of planning agents over time. It is represented by a chronological scale (the x-axis) and the overall population of planning agents (the y-axis), which includes unknown combinations of disciplines and professions, as well as agents that take on the LPA role merely through happenstance, lacking any particular background. In the interest of inspiring action it is appropriate to make a few comments about where and how this strategy might be initiated. However, this section simply discusses a few of the preconditions that warrant early consideration.

Stein, et al. (2001) argue that there are at least two key preconditions in forming an effective knowledge networks:

- Sizeable and stable funding in order to develop the infrastructure that is essential to support research and dissemination, and to fund the travel and meetings that are required even when electronic communication is accessible. ...
- [And second,] a strong commitment to a shared goal or the felt need to solve a common problem (p. 142).
There is an immediate need to consider where these conditions might be more easily achieved; within an organizational environment, such as the WWF network? Or, in

**POPULATION OF AGENTS PLANNING CBE**

![Diagram showing the population of agents planning CBE]

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**LEGEND**

- **D**: Disciplines (1-X)
- **P**: Professions (1-X)
- **Groups of Planners**
- **Knowledge Network**
- **Communities of Practice**
- **Occupational Standards & Certifications (Certified LPAs)**

**TIME**

- SQ: Status Quo
- ST: Short-term
- MT: Medium-term
- LT: Long-term

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**Figure 4.2. A knowledge management strategy for CBE planning**

A descriptive model illustrating the relationship of the three components of the strategy proposed for the management of knowledge in the planning of CBE.
the global effort at large, perhaps initiated through international fora events under the coordination of a non-implementing organization such as The International Ecotourism Society, or a university, and funded by the United Nations, World Bank, etc.? Or, perhaps the best environment would be somewhere in between the two? The present view can provide no such analysis. Nevertheless, it suggests that the critical support needed most likely spills across traditional organizational structures and hierarchies. Therefore, efforts to secure the impassioned members of the first few knowledge networks for CBE planning should probably not be limited to conventional communication ladders. And furthermore, they may require internal concessions to free up the participation of individuals outside their other roles and responsibilities in the many organizations that will not likely share the ‘common need’ to solve this problem. In this regard, there is a need to emphasize the role of the upper end of the knowledge sharing transaction, the knowledge generating institutions. Stein, et al., (2001) conclude that:

Universities can do a lot more to develop and sustain these networks. But to facilitate their supportive role, they must themselves receive greater reinforcement both from their traditional supporters — governments and the private sector — and from the community of scholars and researchers whose professional purview does not yet fully incorporate interdisciplinary, operational project work as a ‘normal’ academic activity (p.145).
5. CONCLUSIONS AND RECOMMENDATIONS

The discussions of this essay support a central argument that knowledge networks, OSCs, and ultimately, communities of practice, constitute a promising strategy to develop the knowledge requirements of LPAs. This three-part strategy responds to the unique nature of the KM situation in the global effort to foster CBE. In particular, it is potentially cost-effective and promises a more flexible, transformational approach to managing the agents, knowledge assets and business processes, than would the more mechanistic, object-oriented approaches in conventional KM strategies. Each section of the paper contributes to this position, and in anticipation of the conclusions and recommendations it will be helpful to review them:

- Section one suggests that there are three well-defined research needs related to CBE that justify considering the KM strategy put forth, and, which may be advanced by leveraging the knowledge management potential of OSCs.

- Section two considers the planning of CBE from the perspective of the essential objects of a KM situation. It suggests that the status quo poses a number of unique conditions in relation to typical KM applications, which justify a more flexible, transformational approach. It argues on three separate levels that: (1) the agents comprise a diverse, unorganized "global effort," which — despite unique challenges — may possess a latent advantage in its network structure that will only be realized through KM; (2) there is reason to believe that the business processes that dominate in planning CBE likely involve core knowledge that is common to most destinations; this common knowledge requires KM beyond technology solutions, and which confronts the thorny issue of competition in the global effort; and, (3) observations suggest that in order to realize the asset-value of its knowledge, the global effort must confront knowledge bottlenecks, the complexities of its internal authority structures, and the lack of shared understanding about its terminology and practices.

- Section three presents a view of communities of practice as a practical and appropriate KM approach with three core elements (communities, domains and practices) that parallel conventional object-oriented models such as the CommonKADS approach. The argument is that communities of practice respond to the KM situation in the global effort, viewing the parts as living, dynamic "organisms" rather than mechanical "objects." The responsiveness in this view extends to its notion of interlinked constellations of communities of practice, which respond to the trans-national, collective nature of the global effort.

- Section four suggests that occupational standards and certifications for LPAs offer a more cost-effective approach for supporting the knowledge requirements of destination communities, than is currently provided in the status quo. The suggestion is for input standards (i.e., essential baselines for enabling skills,
knowledge and core competencies) and certification(s) based upon a reserved title model. Standards and certifications for LPAs can be justified on the basis of their potential contributions to the empowerment of the destination communities (e.g., ecological and socio-economic health, safety and security; and, developing pools of CBE planning expertise), as well as potential contributions to the formation of communities of practice for LPAs (e.g., the overlap in their respective development processes and objectives). Overall, the gap between the vision and the status quo necessitates an incremental strategy. For example, the effort to develop standards and certifications for LPAs could be advanced by forming knowledge networks to initiate the sharing and construction of CBE knowledge across the vast array of professional and disciplinary boundaries that presently fragment the global effort.

5.1. CONCLUSIONS

The introduction identified three issues driving this essay: (A) encouraging and facilitating resident responsive tourism; (B) the north-south gap and related frictions; and (C) tourism and its human resource needs. The discussions throughout this paper suggest a number of related conclusions.

Encouraging and facilitating resident responsive tourism. Overall, this essay responds directly to the need for cost-effective programs to provide communities with information about the issues and impacts of CBE. Effectively, it brings focus to the need defined by Ritchie (1993). It points out that there is currently no real consensus on exactly what knowledge communities require in order to effectively participate in planning CBE. Program design will benefit by articulating the specific skills and knowledge that planners require to assess impacts and issues related to CBE, and thereby, support the communities’ information needs. This essay has responded to that need with a strategy to identify the baseline knowledge requirements, presently and in the future. It suggests that the development of occupational standards and certifications for LPAs will quite likely improve communities’ access to knowledge for the planning CBE, by improving the efficiency and effectiveness of training programs compared to the ad hoc approaches in the status quo. OSCs will empower destination communities by making it easier to identify and validate good information in a sea of providers. Moreover, the formation of knowledge networks and communities of practice for CBE planning can generally contribute to the effectiveness and innovativeness of LPAs. These measures can
support LPAs in providing information to communities, by alleviating knowledge bottlenecks and facilitating broad knowledge construction and sharing.

The north-south gap and related frictions. CBE is, in itself, a technology for the conservation of biodiversity and the economic development of remote communities. Clearly, on the “action” level identified by Ritchie (1993), this essay cannot count as “assessment” of the global effort to foster CBE, nor even of the efforts of individual agencies. The observations discussed, however, do suggest some of the important issues to be engaged in a future assessment thereof. More significant, perhaps, is the paper’s proposal of standards and certifications for LPAs. Standards for the enabling skills, knowledge and competencies required to design and facilitate a planning process are intended specifically for assessing of LPAs’ capabilities to assist remote destination communities. Together with an appropriate form of certification, funding organizations would have a systematic method to assess whether the implementation of their programs complies, and, to demonstrate their accountability. A rigorous development process is, of course, key to the validity of this strategy.

Tourism and its human resource needs. The global effort to foster CBE, has thus far, made no attempt to establish OSCs for planners. This must be taken into consideration in terms of Ritchie’s (1993) “operational” level need to determine the specific skills that need to be included in occupational standards leading to certification. While raising the need for OSCs for planning agents may be more of “policy” level contribution, this is arguably the necessary starting point. In effect, this paper contributes to this need by identifying some specific options for consideration and debate.

Over and above these driving issues, this search for a vision to guide KM strategy in the global effort raises a couple of other important insights. With regard to the current KM situation, the value-driven nature of many agencies involved in planning CBE make the integrity of future empirical research and knowledge work a critical issue. On the other hand, these same values give the agencies the onus to be accountable to the destination communities for their own knowledge and expertise on planning CBE. Overall, it must be emphasized that the strategy put forth to close the gap between status quo and the vision, is necessarily incremental in its approach.
5.2. **RECOMMENDATIONS**

The conclusions drawn from the various discussions of this essay point to several practical recommendations for both practitioners and policy-makers in the global effort to foster CBE planning.

- All LPAs (i.e., conservation and development agencies, and private consultants) should endeavour to understand exactly what skills and knowledge are required in order to effectively facilitate a process to plan and develop CBE, and, guarantee that any other LPAs that they involve in the communities — paid or unpaid — are fully qualified.

- Agencies and institutions promoting CBE should consider as a top priority in the short-term, the allocation of substantial funding to coalesce and support independent knowledge networks. Their thrust should be coordination and facilitation of the research needed to both define occupational standards for LPAs involved in the planning of CBE, and to explore the establishment of an independent accreditation and certification organization. International, transorganizational networks should be considered over internal organization-level networks in order to minimize the potential of controversy that may arise regarding questions about the independence and autonomy of the networks and their resulting knowledge.

- A knowledge network for community-based ecotourism might best focus its attention in the medium-term on empirical study in two key areas: the definition of input standards for designing and facilitating a CBE planning process; and, the design of a system that could practically implement and maintain a reserved title certification program for LPAs.

- Players in the global effort must give serious consideration to the formation of communities of practice for LPAs as a long-term strategy objective for the management of knowledge for planning CBE within and between the institutions and remote destination communities. Where the potential conditions for communities of practice already exist on a more localized basis — within particular organizations or geographic areas, etc. — this approach should be accelerated and pursued more directly. In this regard, the global effort will need to maintain a macro-level view so as to link isolated efforts into a broad constellation of communities.

- The institutions concerned with generating knowledge about CBE, particularly, universities and conservation and development agencies, should aid the global effort by actively promoting and facilitating interdisciplinary, operational projects so as to broaden the impact of their knowledge construction and sharing efforts.

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REFERENCES


