20 **WORKING PAPER**

Towards 'Centres of Excellence' for Community Based Natural Resource Management: Exploring Issues of Capacity Development for Organizations and Networks

Desk Review Report

Patrick John Large

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Contents

Foreword

Over the years, several of IDRC's research programs have been trying to address the issues and challenges related to community-based or people-centered natural resource management. We have supported and continue to support site-based, participatory action research efforts, policy studies and advocacy efforts, networking initiatives, and a variety of capacity development projects. During some periods and in some countries or regions, these activities were or more less interrelated in an attempt to create synergies. Frequently, however, connections were not very strong, and synergies lacking.

Recent reflections on these realities, reinforced by suggestions received from research partners, have provided the momentum for trying some things differently. In programming terms, we launched the idea of bringing core elements of our and our partners' work closer together. This idea involves the (stronger) integration of participatory action research concepts and approaches (or frameworks), in connection with related research practices, and their link to complementary capacity development efforts. In addition, it involves extending the focus of capacity development from individuals to organizations.

To capture the core idea of *centering* efforts through a learning-by-doing *process* we introduced the notion of "towards centers of excellence for community-based natural resource management." The meaning of centers here is: "places" where the current and future generations of CBNRM scholars, researchers, and practitioners will find a home to learn about, practice, improve, and disseminate CBNRM concepts, methods, and achievements.

Together with partners, we have started a number of activities (for now, mostly in Asia) to experiment with and give concrete meaning to the core notion of towards centers of excellence. Information about these activities can be found on the Rural Poverty and Environment (RPE) program initiative website (http://www.idrc.ca/rpe). At the same time, we thought it would be useful to deepen the understanding of the main ideas informing

our efforts, and to find out if and what others are doing in this field of research and learning. In 2005, the RPE program initiative team had the pleasure to work with Patrick Large and in early 2006 he agreed to do a scoping study about "centers of excellence for CBNRM". It is a pleasure to present the results of his inquiry: an informative, and stimulating document.

We hope that Patrick's synthesis of core ideas, and suggested sources for further study will be useful inputs for partners interested in creating learning synergies! The RPE team certainly finds this report inspiring!

Ronnie Vernooy

April 2006

The Issue

The Importance of Sustainable Knowledge Generation

Knowledge is the information and skills that are acquired through experience and learning. The possession of knowledge is our fundamental means for making sense of the world and functioning effectively within it. The degree and breadth of our knowledge base critically determines our ability to solve problems and overcome obstacles in what are increasingly complex and dynamic contexts.

Rapid and dramatic change poses a serious threat to collective knowledge bases and challenges our success and sustainability. In many instances the pace of change has eroded the relevance of knowledge, leading to scenarios of knowledge impoverishment (Manicad & Franca, 2004). While gaining access to information is key to reversing this negative process, it is not enough. The full value of knowledge in terms of its sustainable use and relevance to highly diverse conditions is found in self-generation. To that end, we must make concerted efforts to invest in new and innovative processes of generating and re-shaping our knowledge resources.

In the field of development cooperation, building knowledge bases has become an increasingly important objective. This focus is influenced by a widespread and growing recognition that the challenges facing the nations and people of the developing world are as much about a lack of knowledge as they are about a lack of financial resources (Wenger, 2005). Clearly our ability to address the immense problems that obstruct gains in poverty reduction and sustainable development requires highly evolved, systematic, and holistic knowledge resources.

For the purpose of filling knowledge gaps and enhancing knowledge resources, the primary focus to date has been on transferring technology and information through training. This strategy has been viewed as an effective means of 'building capacity' –

supplying information, know-how, and skills to solve problems. At the same time, such efforts lack sustainability and do not necessarily recognize and build on the existing knowledge base. This has led to a new vision for capacity development, where the focus has shifted from supplying information and skill development to supporting and facilitating the process of endogenous knowledge generation. The 'capacity' that is most critical is thus the ability to generate knowledge sustainably so that innovation can take place through continuous learning, adaptation, and invention that links new information to a particular context (Manicad, 2004).

The major question is how capacities for sustainable knowledge generation can be developed through appropriate supports and facilitation. In answering this question, it is critical to recognize that knowledge, more than mere information, is the property of communities and groups (Wenger, 2004). It is what human communities have accumulated over time through mutual exchanges and contributions. Thus, a primary requirement of achieving sustainable knowledge generation is finding a vehicle that can link social actors into continuous cycles of collective learning and reflection.

The Notion of 'Centres of Excellence'

The emerging emphasis on the process of knowledge generation mirrors a more general shift in understanding about policy objectives, from 'hard' issues of various sectoral divides to 'soft' issues including stakeholder engagement, partnership formation, institutional capacity development, and knowledge creation and learning (de Magalhaes, 2004). At a conceptual level, several assumptions underlie this new focus:

- highly valuable knowledge, skills, and experience exist within multiple social actors, but these are often fragmented and scattered along professional, sectoral, organizational, and geographic lines
- there are significant obstacles to the flow of vital knowledge among key actors

- bringing together dispersed knowledge is essential, but incomplete, as there are gaps in 'stocks' of knowledge that have emerged with rapid changes and increasingly complex problems
- bringing together social actors for shared practice is therefore also required, as it provides a unique opportunity for synergy in new knowledge creation
- the impact of developing new knowledge is amplified by disseminating learning to broad audiences
- the sustainability of knowledge generation is solidified through institutionalization and providing a permanent resource for existing and new actors

To give form to this emergent thinking and in the name of identifying appropriate vehicles for sustainable knowledge generation, trends have converged toward the proposed creation of:

- 'resource centres' for continuous learning
- 'networked organizations' for exchanging experiences
- 'learning communities' to link social actors with common concerns
- programmes for the identification and diffusion of 'good practices'
- 'communities of practice' for building knowledge among practitioners

In short, what has emerged is a strategic policy goal of developing the capacity of organizations or networks to function as what can be termed 'Centres of Excellence'. The assertion is that such forms have the potential to improve the quality of initiatives within their relevant fields through collective and sustainable knowledge generation. The task of bridging gaps and breaking down silos that exist around disciplines, sectoral lines, government departments, and policy communities is significant, requiring no less than a paradigmatic shift in thinking.

Ultimately, those undertaking the work of developing a 'Centre of Excellence' must ask themselves a critical question: "can such an initiative succeed and consolidate a policy agenda based on the explicit recognition that the exchange, creation, and dissemination of skills, knowledge, and innovation is essential to achieving the objective of equipping

those with a stake in a particular problem area with what they need to achieve their goals?" (de Magalhaes, 2004).

Building on Experiences in Community Based Natural Resource Management

While issues related to sustainable knowledge generation and the potential role for 'Centres of Excellence' spans fields of interest, the focus of this study is on the substantive topic of community based natural resource management (see Annex 1 for the original ToRs of the study).

Within this domain, knowledge generation must be particularly adept in order to match the factors that exist at the intersection between human and natural systems: complexity, dynamism, and diversity (McDougall & Braun, 2003). Identifying effective and sustainable management solutions demands the involvement of multiple social actors, each with a stake in the use of the natural resource.

Over the past seven years (1997-2004) partners supported by the CBNRM Program Initiative in Asia have cumulatively amassed a wealth of experiences implementing research and development activities around CBNRM, particularly drawing upon participatory action research (PAR) methodologies. As a result, a number of tools, techniques, and approaches exist throughout this collection of dispersed individuals and organizations. The challenge is to respond to the need already articulated by CBNRM researchers and practitioners to integrate methodological approaches into comprehensive and robust approaches that will improve the quality and results of action research processes (Bessette & Vernooy, 2005). This goal reflects the general assumption underpinning the need for 'Centres of Excellence' – that key knowledge exists but is fragmented and scattered.

Recognition of the need to consolidate experiences and lessons led to further thinking about the nature of capacity development and its sustainability in past programming. A

key observation was that capacity was primarily being built at the level of individuals (Bessette & Vernooy, 2005). While on their own these achievements are significant and worthwhile, it is believed that moving upscale could offer broader successes.

Situating collective experiences and expertise within the social structures of organizations and networks can add value to information by transforming it into knowledge – that which is owned by a group or 'community'. Effective knowledge sharing through systematic communication strategies developed under new social structures creates synergies that expand the overall 'stock' of what is known. When collective learning is incorporated into regular practice, iterative processes generate new knowledge. Efforts to institutionalize CBNRM highly reflect the intention to build capacity for sustainable knowledge generation, as organizations and networks tend to provide a more long-term foundation from which to share and create knowledge and to extend lessons to future generations.

Strategizing Toward 'Centres of Excellence'

The premise of endogenous, self-guided knowledge generation underlying the notion of 'Centres of Excellence' demands that those directly involved in developing these structures determine their ultimate functions and forms. However, it is useful to define the fundamental purposes for pursuing this objective based around some key concepts. Rather than being mutually exclusive, these purposes successively build upon each other and could deepen the strategic and long-term goals for 'Centres of Excellence'.

Integration: bringing methodological tools together to improve research

A key theme running throughout the discussion thus far is the recognition that tools and techniques for doing good action research for CBNRM currently exist, but are dispersed through individuals, organizations, and regions (Bessette & Vernooy, 2005). 'Centres of Excellence' would seek to provide a forum and social structure for combining methods into a comprehensive framework. The creation of a more holistic 'methodological toolkit'

would offer a wider array of options for practitioners to select from, which in turn could improve their work with communities in terms of effectiveness, scientific quality or rigour, and results (Bessette & Vernooy, 2005). Such active use and adaptation of methods in practice is essential to going beyond simply sharing information to a point where the capacity to create knowledge is expanded through implementing new tools.

Coordination: bringing practitioners and other actors together to create synergies

The notion of 'Centre of Excellence' is certainly much more than a means of pooling existing resources. A significant opportunity exists for creating new knowledge and filling gaps by unleashing the potential of human resources through coordination. This includes the critical and prominent issue of partnership-building. But it also goes beyond this to facilitating joint practice among a community of actors, which helps create synergies that lead to innovation. This process is informed by Social Learning theory with its emphasis on how multiple social actors learn together and from each other. It also reflects a shift in focus of capacity development from building human capital (in the individual) to building social capital (in relationships and networks) (Manicad & Franca, 2004).

Mainstreaming: supporting the central use of PAR for CBNRM in organizations

Participatory action research for CBNRM is a fledgling field of study that faces major hurdles for widespread recognition. It is often confronted by conventional institutional structures that emphasize 'objective science' separated by clear barriers of sectors and disciplines. As such it is not surprising that developing the domain has thus far been generally limited to individuals and projects. However, the cumulative success of these efforts has generated a momentum that could now be captured by consolidating lessons and experiences in a broader social structure. Here again the main issue is translating individual capacity development to organizational capacity development. Mainstreaming is about making ideas, attitudes, and activities normal or conventional within an organization. This requires a critical and sustained effort on the part of organizations to examine their internal culture, core functions, primary activities, and organizational

capacities, and to subsequently design strategies to adapt these components. Such a process will take significant time and energy. The benefit, however, is a much greater sustainability in the use and adaptation of CBNRM concepts, methods, and approaches.

Institutionalization: creating a 'home' to learn about, practice, and improve CBNRM

The processes of mainstreaming and institutionalization share the key similarity of situating conventions of practice within an organization. This includes converging experiences, knowledge and lessons from the past within an active social structure. Where the notion of institutionalizing CBNRM in 'Centres of Excellence' builds on and deepens mainstreaming is in its emphasis on a 'home' or communal 'space' that can welcome in practitioners, researchers, scholars or other stakeholders to learn about CBNRM without them necessarily belonging to the organization. This expands the conceptualization to more open knowledge sharing and incorporates the notion of a 'resource centre' as a permanent and sustainable fixture to support CBNRM work.

Institutionalization further differs from mainstreaming in its focus not only on ensuring the consistent use of CBNRM by organizations, but promoting its active improvement through a cycle of sharing knowledge, putting lessons to use through practice, and conscious reflection for the sake of learning. Pursuing excellence in this way makes a given 'Centre' a locus for the consolidation of expertise, thus attracting and retaining dynamic and qualified personnel.

Extending knowledge resources: sharing lessons with a new generation

The final pinnacle in deepening the purposes of 'Centres of Excellence' and what they could potentially achieve is a focus on taking the benefits from integration and coordination in terms of converging experiences and building new knowledge resources, and utilizing the organizational advancements of mainstreaming and institutionalization to share lessons with a new generation (Bessette & Vernooy, 2005). This is the point where looking inward to developing organizational capacities is turned outward to providing capacity building initiatives. A vital element of this is developing and delivering holistic curriculum on CBNRM approaches and methods to various learners. As a means of

cultivating and furthering the theory and practice of CBNRM among future academics and practitioners, this is an essential contribution to sustainable knowledge generation. Additional efforts could involve providing training, advisory services and facilitating learning processes for local communities.

Seeking Resources to Inform and Guide the Strategy

This study concludes that experiences with the types of organizational capacity development that could reflect working towards 'Centres of Excellence', as they have been broadly conceptualized above, are very limited. In what follows, this paper discusses some of the main elements of such a strategy. The emphasis is not on finding a definitive model or structure for the potential organization or network, nor on the exact functions the body should perform. Neither is the goal to look for a sequence of steps of organizational capacity development. Rather, the aim is to provide thoughts and ideas that will allow those directly involved in working 'towards Centres of Excellence' to ask the right questions.

What could be the key functions of 'Centres of Excellence' and how will these meet the needs of practitioners, researchers? How could these functions best be developed? In terms of organizational development, what would be the key organizational capacities to pursue? What are good strategies to develop these capacities?

There are many areas of literature with potential relevance to thinking about how and what can be accomplished through a goal of working towards 'Centres of Excellence'. The remainder of this brief review focuses on literature concerning organizational and network capacity development, 'Communities of Practice', and 'Learning Communities' as a basis of informing future directions. The paper then goes on to examine practical case examples where in one form or another efforts of organizational capacity development reflect what might be pursued through 'Centres of Excellence'.

The Approach

The broad conceptualization of 'Centres of Excellence' discussed above is intended to ground thinking about possibilities. The aim is to understand the various ways in which the underlying ideas are conceptualized in other cases by other actors. As such, there is no attempt to define a single approach to pursuing 'Centres of Excellence'. Instead, theoretical bases from a variety of approaches could inform a general and specific vision for what can be achieved.

The term 'Centre of Excellence' is used in a wide variety of contexts. Primarily it is found in the world of practice attached as a label to an organization which, after proven success in its respective domain, is deemed to haven achieved excellence. In theory and academic literature, the term is far less common. In either case, theory or practice, caution must be taken in interpreting the meaning of what is otherwise a generic or amorphous term. Thus, the search informing this report was focused on information and ideas to coincide with the underlying meaning associated with a broad vision for 'Centres of Excellence'. This led to various bodies of literature. The broadest and most detailed is that concerning 'capacity development', particularly for organizations. The second focuses on the concept of 'Communities of Practice', which has much to offer in terms of informing thoughts on improving performance through joint practice. The final body of literature concerns 'Learning Communities' and their variable definitions.

Organizational Capacity Development

A clearly defined and important goal of pursuing 'Centres of Excellence' for CBNRM is to translate individual level capacity development efforts to the organizational level. In order to do this, it is useful to fully understand what is meant by 'organizational capacity development' and what might be the strategies to follow such a process in terms of building the particular organizational form a 'Centre' could take. The task of assigning

such meaning and gaining clarity is made difficult by the breadth and diversity associated with the field of capacity building or capacity development.

The Broad Contours of 'Capacity Development'

Capacity development has become an immense issue in the theory and practice of development cooperation. A host of concepts have been included under its general umbrella, and thus navigating through the vagueness and generality of the concept is a challenging endeavour (Morgan, 1998). In the broadest scope the term is synonymous with an entire approach to people-centred, sustainable development (Eade, 1997). At a narrow scope it could refer to a single training course.

Discerning how capacity development concerns organizations requires careful extractions from the generality and complexity of concepts. For some, capacity development is implicitly about helping organizations improve their performance. More commonly though capacity development is broader, including individuals, groups, institutions and whole societies, in addition to organizations. A prominent definition of capacity development illustrates this point:

"Capacity development is the process by which individuals, groups, organizations, institutions, and societies increase their abilities to perform functions, solve problems and achieve objectives; and to understand and deal with their development need in a broader context and in a sustainable manner" (UNDP, 1997)

Thus, capacity development can operate at diametric levels. At the most macro level, capacity development is concerned with reforming national economic, legal, social, and political institutions – the formal and informal 'rules of the game' that govern whole societies. The UNDP conceptualizes its work in this regard around addressing larger system factors in the 'enabling environment', "which include overall policies, rules and norms, values governing the mandates, priorities, modes of operation, civic engagement etc. within and across sectors" (UNDP, 2005a). At the most micro level, the focus is on

providing knowledge and skills to individuals through education and training – capacity building as 'investing in people' (Eade, 1997).

Narrowing to Organizations and their Capacities

The split between micro and macro has generally left the meso level of organizations neglected and thus vulnerable (Horton et al, 2003). Nevertheless, significant work has been done to focus on the capacities required for organizations to succeed. Organizational capacity has been defined in several broad terms as:

- the potential of an organization to perform (Horton et al, 2003)
- the ability of an organization to successfully apply its skills and resources towards the accomplishment of its goals and the satisfaction of its stakeholders' expectations (Horton et al, 2003)
- the abilities that enable organizations to carry out functions and achieve their development objectives over time (Morgan, 1998)
- the ability of organizations to manage successfully their affairs (UNDP, 2005a)

Thus capacity is really about the ability to perform functions effectively. This provides a basis for attaching greater detail to conceptualizing capacity. An assessment of capacity could focus on the performance of organizational functions such as decision-making, leadership, service delivery, financial management, adaptation and learning, and so on (Morgan, 1998). The UNDP (2005a) puts forward a detailed list of 'functional capacities' relevant not only to organizations but to wider institutions:

1) Policy dialogues & partnerships
   - To build and manage partnerships
   - To foster an enabling environment for civil society and private sector
2) Mobilize and analyze information and knowledge
   - To gather information and diagnostic analysis
   - To adapt global knowledge to local context

3) Vision & planning

- To set objectives
- To develop strategies and draw upon action plans
- To develop appropriate policies

4) Implementation & management

- To implement strategies, action plans, and policies
- To mobilize and manage resources

5) Monitoring & accountability

- To monitor and measure progress
- To evaluate planning, implementation, and results

In a context of non-profits in North America, organizational capacity is defined as a pyramid of seven essential elements (Figure 1).

Figure 1. Capacity Framework (Venture Philanthropy Partners, 2001)

- Aspirations: An organization's mission, vision, and overarching goals, which collectively articulate its common sense of purpose and direction

- Strategy: The coherent set of actions and programs aimed at fulfilling the organization's overarching goals.

- Organizational Skills: The sum of the organization's capabilities, including such things as performance measurement, planning, resource management and external relationship building.

- Human Resources: The collective capabilities, experiences, potential and commitment of the organization's board, management team, staff and volunteers.

- Systems and Infrastructure: The organization's planning, decision-making, knowledge management, and administrative systems, as well as the physical and technological assets that support the organization.

- Organizational Structure: The combination of governance, organizational design, inter-functional coordination, and individual job descriptions that shape the organization's legal and management structure.

- Culture: The connective tissue that binds together the organization, including shared values and practices, behaviour norms, and most important, the organization's orientation towards performance.

The distinction made between the three higher-level elements and the three foundational elements in the pyramid is mirrored in a clearer fashion by another highly useful framework. This conceptualization divides two types of capacities that all organizations need in order to perform well: resources and management (Figure 2). Resources are the traditionally 'hard' capacities of infrastructure, technology, finances, and human resources. Management are the 'soft' capacities that enable conditions whereby goals, objectives, and strategies can be set and achieved (Horton et al, 2003).

Figure 2. Types of Organizational Capacity (Horton et al, 2003)
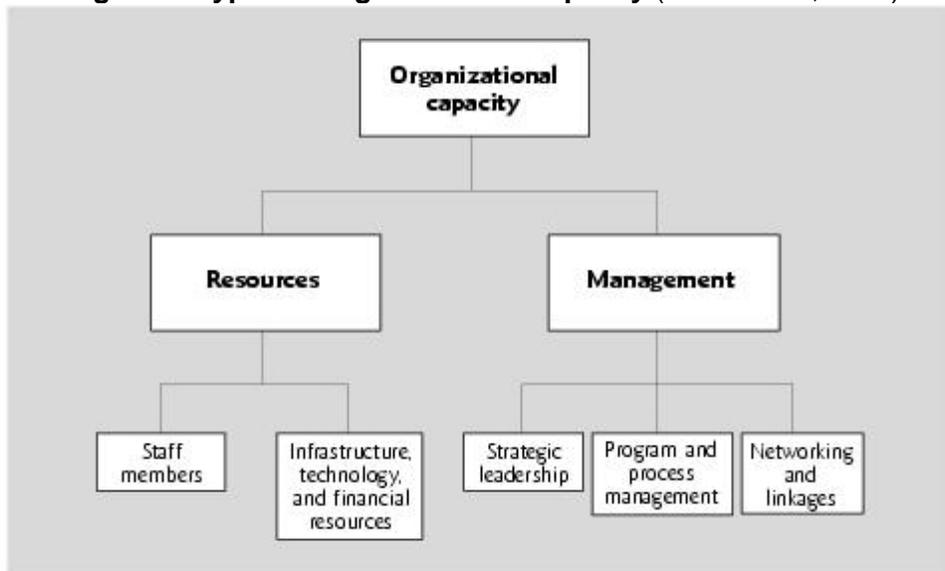
As a grounding framework for understanding organizational capacity, each of the five components deserves further explanation. Staff members seem like an intuitively self-evident organizational capacity – the collective skills and abilities of personnel. At the same time, it serves us well to reflect on the desire to translate individual capacity to organizational capacity, and what this means in terms of human resources. The key is understanding that skills existing within staff members, which reflect their individual training, education, and experience, only become collective knowledge when they are shared among the members of an organization and become embedded in the overall management system and culture (Horton et al, 2003). In this sense, human resources as an organizational capacity become much more than a loosely amalgamated set of skills and talents. Instead, it represents the synergy and power of knowledge sharing and a potential for collective knowledge generation.

Infrastructure and technology seem to be another straightforward 'hard' organizational capacity. Without an adequate level of such resources, in some form, organizations simply cannot perform their functions. But infrastructure and technology are not simply a generic and standardized requirement. There are subtle but specific permutations, and managers must really consider how such capacities serve broader organizational goals.

Financial resources are an absolute necessity for the success of any organization. The ability to procure finances has a direct and critical influence on a key element of an organization's overall performance – its financial sustainability. Thus, it is a capacity that can never be neglected, as it is fundamental to the sustainable achievement of aims.

Strategic leadership is the first of the 'soft' capacities of management. It is defined as the ability "to assess and interpret needs and opportunities outside the organization, to establish direction, to influence and align others towards a common aim, to motivate them and commit them to action, and to make them responsible for their performance" (Horton et al, 2003). Deepening what might otherwise be considered individual skills set within the context of an organization, leadership capacity as defined by the UNDP concerns the "ability of a human collectivity (organization) to generate needed decisions, actions, and behavioural and/or role changes necessary for the pursuit of a shared goal" (2005b). The emphasis is therefore on the strength of group processes for decision-making, rather than solely on the quality and behaviour of individuals.

Program management is about the direct production and delivery of services to clients and stakeholders (Horton et al, 2003). This capacity has a direct influence on organizational performance including effectiveness (achieving core objectives) and relevance (meeting the needs of clients). Process management on the other hand provides critical supports to programming by backstopping its functioning through control of resources and internal processes. As such it has a direct bearing on the performance of efficiency (producing services with a minimum of inputs).

The final type of organizational capacity, networking and linkages, is an increasingly fundamental component of any organization's ability to succeed and excel. This central role is of course heavily fuelled by the information revolution and advancements in communication technologies that facilitate greater knowledge sharing. The importance of networks is in fact so great that it can be considered to transcend a place-based conceptualization of an organization to a structure that connects dispersed members into a new organizational form. This idea is further explored below.

Putting the Wheels in Motion: Improving Organizational Capacities

In the simplest terms, organizational capacity development is about improving the various capacities outlined above. In terms of the UNDP's 'functional capacities', it is concerned with improving an organization's ability to build and manage partnerships, to access and use information, to create visions and plan, to implement and manage programs, and to be accountable. For the capacity pyramid, it is about re-articulating organizational aspirations, re-aligning strategies with these aspirations, building a variety of organizational skills, and developing the 'hard' elements that provide a foundation for achieving goals. Finally, in terms of 'hard' and 'soft' capacities it is about improving resources and getting better at various management functions.

Beyond the 'what' questions are the 'how' issues and the need to focus on process. A major caveat about capacity development is that it takes time and is best understood as an iterative and continual process. Another key element is that capacity development, in order to be truly successful and worthwhile, must ultimately be led from within the organization. The strategy should be based on a careful assessment of capacity needs in order to have the most significant impact. Self-direction is also critical to a sense of ownership and commitment to the process.   These key elements are captured in a working definition by Horton et al (2003):

"Organizational capacity development is an ongoing process by which an organization increases its ability to formulate and achieve relevant objectives. It is undertaken by an organization through its own volition. It is carried out through the application of the organization's own resources, which may be supplemented with external resources and assistance. External support can take different forms, including provision of financial resources, technical expertise, training, information, political negotiation, and facilitation of capacity development processes."

In carrying out the process of capacity development, various authors have outlined key principles to consider. UNDP provides a number of 'default principles' for their broad capacity development efforts. While they are focused primarily at a macro level of societies, several translate to the level of organizations:

- Don't rush. Capacity development is a long-term process.
- Respect the value systems (of the organization) and foster self-esteem (where capacity building can lead to empowerment).
- Establish positive incentives to facilitate capacity development.
- Build on existing capacities rather than creating new ones.
- Scan locally and globally; reinvent locally.
  - There are no blueprints. Capacity development means learning. Learning is a voluntary process that requires commitment and interest. Knowledge transfer is no longer a relevant modality. Knowledge must be acquired.
- Stay engaged under difficult circumstances.
  (UNDP, 2005a)

Horton et al (2003) provide a set of principles specifically for organizational capacity development:

- Take ownership of your organization's capacity development initiative.
  - Successful efforts depend upon an internal process of defining needs and taking full responsibility for developing the capacities to meet such needs.
- Focus on the needs and priorities of the organization as a whole.
  - Move beyond the level of individual or project capacity to view the totality of the organization, which in turn makes capacity development a more sustainable initiative.
- Management of capacity development processes is crucial for success.
  - The process for developing capacity is often as important as its goals.
- Prepare for monitoring and evaluation at the outset of capacity development.
- Capacity development is more than a one-off event.

o   It takes time and an on-going commitment of resources.

- Establish an environment conducive to learning and change.

Building on these principles, Horton et al (2003) further provided a series of steps in pursuing a holistic approach to organizational capacity development (Figure 3).   The basic sequencing of these steps mirrors what would otherwise be commonly found in any planning cycle – reviewing goals, identifying needs, implementing a process, and monitoring and evaluating its achievement.   However, it does provide some useful guidance in thinking through the essential components.

Figure 3. Steps in a Holistic Approach to Capacity Development (Horton et al, 2003)
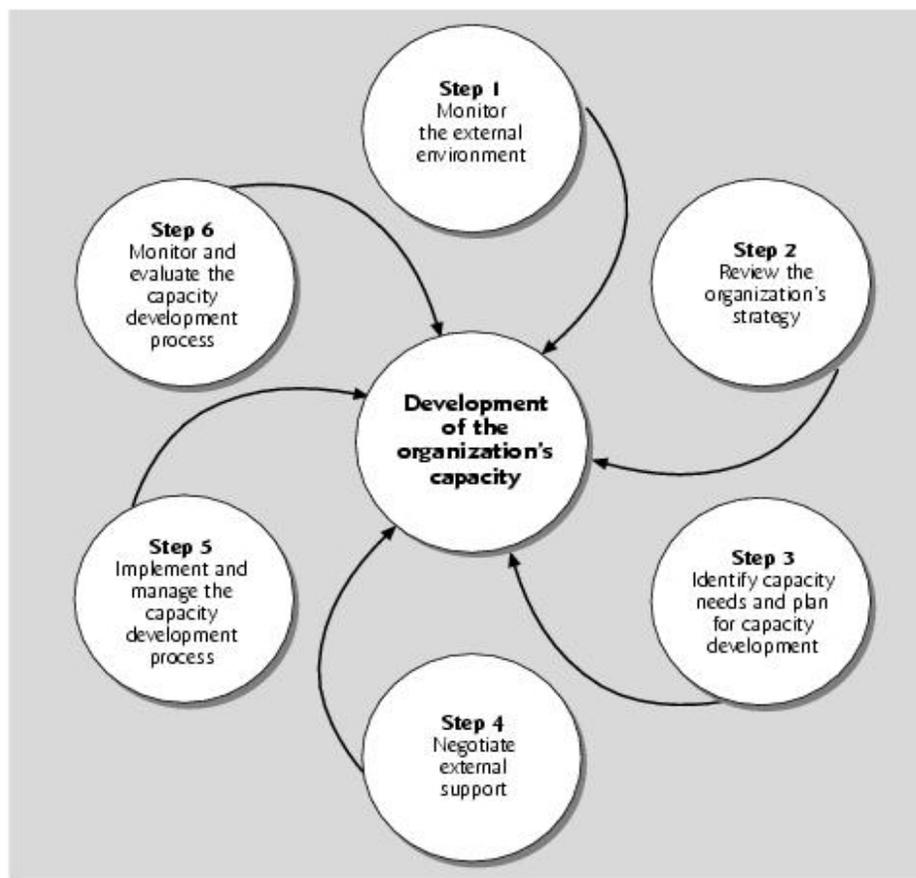
Reflecting on the Relevance of Organizational Capacity Development for Building 'Centres of Excellence'

The primary purpose of reviewing key literature concerning 'organizational capacity development' is to find concepts and ideas to inform thinking about building 'Centres of Excellence'. This involves a process of reflection and asking critical questions. The first major issue is determining how a conceptualization of a 'Centre of Excellence' fits under the generic heading of 'organizations'. This in turn forces a fundamental question – are 'Centres of Excellence' place-based organizations with a physical building and clearly defined staff members such as a research and development organization, an NGO, or a university department OR are 'Centres of Excellence' beyond such fixed entities, existing through some form of networked membership? In other words, what is the practical vision for these 'Centres'?

Answering this question is ultimately the responsibility of those directly involved in pursuing the strategy. Moreover, the concept of a 'Centre of Excellence' need not mean only one practical form or another. Rather, the key is capturing the fundamental purposes of integration, coordination, mainstreaming, and institutionalization in whatever structural form is selected. In many ways, the concept of a 'Centre of Excellence' attempts to bridge gaps between traditional sectoral divides and in fact situate itself at the junction between organizations and networks.

Given that the following section will expand upon theories related to capacity building for networks, here an exploration is presented of how a more conventional vision of a 'Centre of Excellence' relates to the literature on organizations. The primary question here is whether or not the conceptualization of a 'Centre of Excellence' shares the same fundamental features and characteristics of all organizations and whether it is dependent on the same basic capacities for its performance. In particular, what specific and unique capacities could be developed in 'Centres of Excellence' and how does this influence the process of organizational capacity development?

A 'Centre of Excellence' reflecting a traditional organizational form, housed within a university department or a research and development agency would certainly require the same fundamental capacities of all organizations. The 'hard' capacity of finances would need to be developed through accessing sustainable and secure financial sources. Technology and infrastructure would also need to be adequately supplied and managed, and particularly oriented toward facilitating integration with partners.

Developing the capacity of staff members within a 'Centre of Excellence' would require a unique approach. First, the integration of scattered tools, techniques, and approaches would have to take a defined shape in terms of knowledge sharing and acquisition amongst personnel. Specific activities would have to be planned and overseen to ensure that a general effort of pooling information was translated to active learning. In particular this would require prioritization and commitment from management and the organization as a whole to the learning process.

Second, the notion of human resource development within the context of a 'Centre of Excellence' would highly emphasize the notion of collective knowledge sharing and creation so that capacities are truly organizational. Learning about new tools and methods and then putting them into practice would be much more than an individual experience. Rather, integrated frameworks and coordinated efforts would become imbedded in norms and processes of the organization.

Leadership capacity is critical for all organizations. 'Centres of Excellence' are complex, highly-evolved, dynamic organizations with highly diverse functions. As such, their leadership must be especially acute and equal to the challenges. Those organizations willing to take on the work of pursuing 'Centres of Excellence' are at such a stage because of the quality of their leadership. Thus, a key principle in furthering developing leadership capacity is to recognize what already exists and to build upon it.

Focusing on program management for a 'Centre of Excellence' is a major task as it involves a thorough analysis and redefinition of goals and directions in order to

mainstream PAR and CBNRM across the organization as a whole. More than any other component of capacity development, this aspect should be provided with a significant time allowance. Moreover, expanding the potential stakeholder base through re-orienting the organization toward becoming a 'resource centre', a 'home' for future practitioners, and a provider of capacity building demands completely new thinking about the nature of service delivery and staying relevant to client needs. The products of program activities widely expand from research to training, and entirely new capacities for scanning the external environment to stay up-to-date on client needs must be developed. Just as demanding will be aligning process management capacities to accommodate a much wider portfolio of activities and functions.

The final generic organizational capacity of networking is fundamental to 'Centres of Excellence', as their essence is based around an attempt to bring together practitioners and their knowledge resources. In fact, networks, partnerships and collaboration may be considered the driving force behind a broader vision of 'Centres of Excellence' – a social structure of a community of members actively sharing knowledge resources, improving each other's practice through joint experimentation and learning, but existing beyond a physical space.

Key Resources on Organizational Capacity Development

The preceding section drew heavily on several key resources which could be utilized for further reading and reflection on how organizational capacity development can inform a strategy of pursuing 'Centres of Excellence'. The most complete text on the subject is *Evaluating Capacity Development* by Horton et al (2003) available online at http://www.idrc.ca/en/ev-31556-201-1-DO_TOPIC.html

A condensed version of the main thoughts and ideas of this text are provided in Issue 17 of capacity.org available at
http://www.capacity.org/Web_Capacity/Web/UK_Content/Download.nsf/0/F1B39833336
AEFECC1256D4900503C21/$FILE/issue-17e_final.pdf

Another comprehensive and useful text is *Capacity-Building: An Approach to People-Centred Development* by Deborah Eade, which includes a chapter entitled 'Investing in Organizations'.

A recent and detailed examination of capacity development at a broad scale from the perspective of a major development organization is provided by a UNDP document entitled "Capacity Development: Practice Note" available at: http://www.capacity.undp.org/index.cfm?module=Library&page=Document&DocumentID=5599

Prepared for the Canadian International Development Agency (CIDA), "Capacity and Capacity Development – Some Strategies" by Peter Morgan (1998) provides a clear overview of issues and several examples of direct strategies, taking primarily an organizational slant. The document is available at http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUImages/CapacityDevelopment/$file/1998-10paper(Wrkshp11).pdf

Finally, an interesting, informative, and unique take on capacity building is provided by the Venture Philanthropy Partners (2001) in a context of non-profit organizations in North America. *Effective Capacity Building in Non-profit Organizations*, available at http://www.venturephilanthropypartners.org/learning/reports/capacity/full_rpt.pdf, offers extensive advice on assessing each of the seven elements of the capacity framework, using real-life case examples. It also provides a highly detailed capacity assessment grid that could guide analysis of the level of each capacity within an organization.

Networks and Partnerships

In many ways the concept of 'Centres of Excellence' outlined above concerns another scale of organization beyond individual entities. This is the level of networks and

partnerships that transcend space and the organizational silos that separate social actors. The need for such initiatives is clear. The magnitude of issues related to poverty reduction in general, and the complexity and diversity of managing natural resource systems specifically, require expertise and capacities that are beyond the boundaries of any single organization (Ubels, 2005). Most organizations recognize this fact and are therefore seeking to build better partnerships and enhance collaboration in order to access the resources and abilities to achieve their own objectives.

There are two main reasons for pursuing networks, each of which reflect broad purposes for 'Centres of Excellence'. The first is to share new ideas and information in order to learn from others with similar interests and activities (Eade, 1997). This mirrors a focus on the *integration* of methodologies and sharing tools and techniques for PAR and CBNRM. The second is to pool participants' experience and energy in order to enhance their collective and individual impact. This reflects the goal of *coordination*, where the achievement of results is enhanced through not only strengthening individual actors, but through working toward joint action (Lopes & Theisohn, 2004). At the highest level, this involves more than bringing together individuals. Rather, networking organizations themselves can unleash collective capacity and synergy that produce results beyond which can be achieved by any single organizational actor on its own.

The capacity development process of building networks and partnerships is fraught with challenges. First and foremost, those undertaking such an initiative must recognize that the process requires significant time and resources, and thus a long-term and dedicated commitment. Moreover, the process demands strategic planning and asking the right questions about what is to be achieved. This involves aligning the goals, strategies and values of participant organizations, defining the nature and purpose of the partnership, and negotiating and clarifying the roles of different organizations (Horton et al, 2003).

One way to engage thinking about the nature and purpose of networks and partnerships is to discuss form and function. Some have clear and concrete objectives and a defined membership base integrated into a formal organizational structure, while others are loose

associations with shifting priorities, a diffuse membership, and an informal structure (Ubels, 2005). Network forms can also be defined around a common focus – service delivery, social change and advocacy, sectoral, and knowledge sharing. Gaining an understanding of various forms provides a basis for discussing directions, potential ways of working, leadership requirements and so on.

Determining key functions is perhaps even more important. Participant organizations need to think through and clearly articulate their needs and expectations of a network. The function may be facilitating access to information and opportunities for learning, offering access to resources, or allowing joint action (Ubels, 2005). The key is determining the value-added that can be expected from a partnership or network and cultivating a well-defined appreciation for such value by all concerned. This demands open communication, clear sharing of knowledge and expertise, shared objectives, well-defined plans and responsibilities, sources of funding, accumulation of trust, embracing the values and norms of partnerships, and strong leadership to create synergy and coherence (Manicad & Franca, 2004).

Another useful mechanism for negotiating the purpose of a partnership and clarifying respective roles is an assessment of ideal partnership types. Horton et al (2003) provide four such examples:

- Focusing on specific capacity needs
    - Primarily a conventional 'provider'-'client' relationship; contribution to organizational capacity tends to be limited; often a short-term relationship
- Partners with a common mission
    - Parties are committed to a common goal, they have a role to play in forwarding this agenda, they see benefits from working together, and they recognize a potential to learn from each other
- Focusing on a common problem

- o Parties do not share a specific mission but concern for a common problem area (such as CBNRM); greater potential for long-term collaboration
- Networking
  - o Members involved through a complex web of relationships for the benefits of exchanging information, experiences, and resources

Building on these partnership types, Horton et al (2003) identify seven elements of successful partnerships that are highly informative in thinking about the nature of partnerships and partnership-building for 'Centres of Excellence' (Figure 4 and Table 1).

Figure 4. Elements of Successful Partnerships for Capacity Development

Principled negotiation

Link to the organizations' mission, strategy, and values

Division of roles and responsibilities

Joint organizational capacity development effort

Continuity and persistence

Flexibility

Learning-oriented approach

Agreed-on purpose
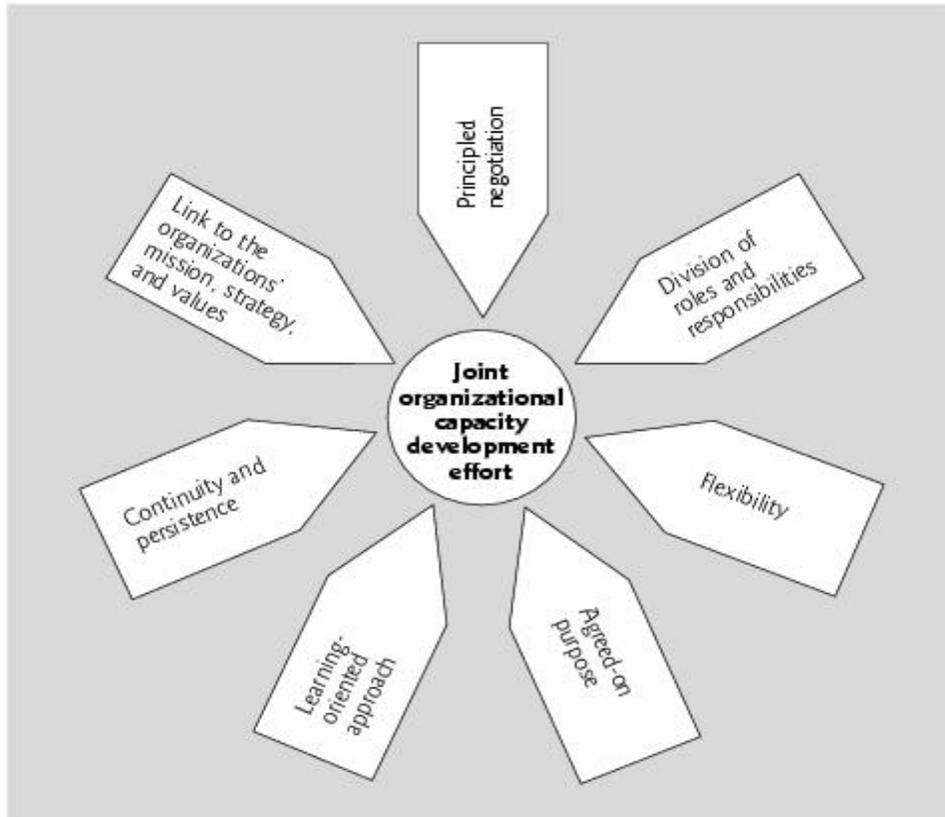
(Horton et al, 2003)

Table 1. Elements of Successful Partnerships for Capacity Development

Link to organizations' mission, strategy, and values	A partnership should contribute to each organization's mission and be consistent with its strategies and values.
Clear purpose and intent	Each organization should determine why the partnership is useful to the achievement of its goals.
Clear division of roles and responsibilities	Each organization needs to take responsibility for its own development. In capacity development, the partners need to play different roles and perform different tasks.
Principled negotiation and joint decision-making	Principles should be established for the relationship prior to action. Ownership is promoted when all parties are actively involved in decision-making.
Openness to learning and change	Learning is at the heart of capacity development, and it needs to take place in all participating organizations.

Continuity and persistence	Capacity development is a process which requires time, resources, and persistence.
Flexibility	Relationships need to change over time as conditions and issues evolve.

(Horton et al, 2003)

Reflecting on the Relevance of Networks and Partnerships for 'Centres of Excellence'

Given the focus of 'Centres of Excellence' on integration and coordination of social actors dispersed across organizations and geographic regions, networks and partnerships have a clearly pervasive and fundamental importance. Visioning a 'Centre' as such a higher organizational form requires new thinking about the nature of required capacities. Existing beyond the walls of physical buildings, 'Centres' would not require the conventional technology and infrastructure of traditional organizations, but adapted information and communication technologies to effectively link members. Accessing financial resources would be another critical endeavour, considering what would be required for the financial sustainability of a network beyond the particular financial management of individual members.

Human resources in this organizational form would also take on a new dimension. Staff members would consist of spatially dispersed individuals in diverse settings. 'Centres' would need to determine the nature of this structuring from defined, formal membership to diffuse and open-access involvement of participants. The latter may threaten coherence and strategic direction. In order to achieve the demanding objectives of a 'Centre of Excellence' and to avoid the pitfalls of unstructured and loose associations, it may be therefore more advantageous to pursue a defined and committed membership.

Given the complexity of what is trying to be achieved through a network, leadership capacity is vital. As discussed above, keen leadership is essential to unleashing potential synergies through collaboration and managing convergences. With multiple organizations, joint leadership must be negotiated and promoted.

As at the conventional organization level, program and process management will have to be fundamentally reformed to accommodate what is to be achieved through a network-based 'Centre of Excellence'. Here it would serve participants well to genuinely consider several key elements of successful partnerships in moving forward to develop the capacities of this joint initiative. In particular, organizations must analyze and define how partnering in a 'Centre of Excellence' would reflect their own mission and goals, or how these would be redefined through the new collaboration. Each organization must also establish pre-determined ideas about how the partnership will add value to the achievement of their goals, and then communicate such expectations to the other members of the network. This will help ensure that the partnership functions for the benefit of all participants. Furthermore, organizations must define their own responsibilities and accountabilities to the partnership, understand their roles, and actively involve themselves in joint decision-making.

Networks and partnerships offer clear benefits in terms of improving the organizational performance of members through the sharing of knowledge, expertise, and experiences, and through collective action. Taking advantage of such potential is the fundamental basis for pursuing 'Centres of Excellence'. However, managing networks is notoriously challenging. The key to being effective in developing the capacity of networks is implementing a process of negotiation and planning among members to determine their needs, how collaboration can fulfil these, and what steps are required to make the partnership work for all in an equitable and sustainable manner.

Key Resources on Networks and Partnerships

As with the general organizational capacity development literature, a key resource for partnerships is chapter 5 of Evaluating Capacity Development by Horton et al (2003) available online at http://www.idrc.ca/en/ev-43625-201-1-DO_TOPIC.html

Eade's book, *Capacity-Building: An Approach to People-Centred Development* (1997), also has a chapter on networks.

Issue 6 of capacity.org focuses on partnerships as an instrument for capacity building, while Issue 27 focuses specifically on networks and partnerships.

Issue 6:

http://www.capacity.org/Web_Capacity/Web/UK_Content/Download.nsf/0/C2C542CEE405374CC1256D560029B77B/$FILE/issue-06e.pdf

Issue 27:

http://www.capacity.org/en/content/download/2010/31387/file/CAPORG+06-27+ENG+FINAL.pdf

The Importance of Learning to Capacity Development

While discussed in various respects above, the critical role of learning for effective capacity development justifies a brief section of its own. 'Centres of Excellence' are conceptualized to essentially act as learning organizations. Therefore, it is useful to think through ways in which capacity building toward such organizational forms can promote and facilitate collaborative learning.

As a capacity building strategy, Manicad & Franca (2004) suggest pursuing the generation of social learning to foster collective action. 'Social learning' refers to the way in which people interact and influence each other to form knowledge that is relevant to their lives. By engaging in social interaction at multiple levels, "different people with different values, tools, and perspectives negotiate towards complementary perspectives and behaviours that lead to concerted actions" (Manicad & Franca, 2004).

This process captures the essential nature of what is trying to be achieved through 'Centres of Excellence'. Integration and coordination are about brining together social actors and their respective knowledge bases, structuring social interaction and active learning, negotiating shared perspectives and goals, carrying out joint action, and

collectively learning more from experiences. Most organizations working on CBNRM initiatives are familiar with social learning processes, as they are essential to facilitating participatory action research and engaging multiple stakeholders around particular natural resource contexts or issues. The challenge is to turn what is known about social learning inward to practitioners, and the ways in which networked CBNRM-oriented organizations can engage in social learning to improve their collective practice. This is new ground that goes beyond an understanding of how individuals learn, and even the process of organizational learning, to discovering how different actors from different institutions and knowledge systems learn from each other (Manicad, 2004).

'Communities of Practice'

The concept of 'Communities of Practice' is highly pertinent to a broad vision of 'Centres of Excellence' as an integrated and coordinated collection of practitioners in CBNRM bound together by joint practice rather than physical space. The available literature can thus keenly inform thinking about how the process of sustainable knowledge generation can be facilitated through collective social interaction. In particular, it offers an approach to knowing and learning that fits well with an attempt to consolidate and expand work on participatory action research and CBNRM.

'Communities of Practice' are "groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (Wenger, 2005). Three crucial characteristics build on this definition:

- **The domain**: A 'Community of Practice' has an identity defined by a shared domain of interest. Membership implies a commitment to the domain, and therefore a shared competence that distinguishes members from others.
- **The community**: In pursuing their interest in their domain, members engage in joint activities and discussions, help each other, and share information. They build relationships that enable them to learn from each other.

- **The practice**: Members are practitioners, not merely a group that shares an interest in something. They develop a shared repertoire of resources: experiences, tools, and ways of addressing recurring problems – in short, a shared practice. This takes time and sustained interaction.

In order to develop a shared practice, the community engages in a variety of activities concerning their common domain: collective problem solving, requesting information, seeking experience, reusing or sharing assets, coordinating and synergizing common objectives, discussing new developments, documenting lessons and experiences, visiting each other to learn by example, and mapping knowledge and identifying gaps (Wenger, 2005).

'Communities of Practice' have a number of unique benefits that make them highly valuable:

- They enable practitioners to take collective responsibility for managing the knowledge they need, recognizing that, given the proper structure, they are in the best position to do this.
- Communities among practitioners create a direct link between learning and performance.
- Practitioners can address the tacit and dynamic aspects of knowledge creation and sharing, as well as the more explicit aspects.
- Communities are not limited by formal structures: they create connections among people across organizational and geographic boundaries.
  (Wenger, 2005)

In terms of improving organizational performance, 'Communities of Practice' have been observed to add value in several critical ways:

- They help drive strategy
- They start new lines of business and generate innovations

- They solve problems quickly
- They transfer best practices
- They develop professional skills
- They help organizations recruit and retain talented personnel
  (Wenger & Snyder, 2000)

In order to understand the potential sustainability and full utility of a 'Community of Practice', it is useful to compare it to an organizational structure formed around a project. Such a 'team' exists to accomplish a task or set of objectives, its members may be assigned from the larger organization, it is held together by the project's timeline or milestones, and ceases to be once the project is complete. A 'Community of Practice' on the other hand exists explicitly for the development of its members' capabilities through knowledge sharing and creation; membership is voluntary; passion, commitment, and an identification with a shared practice maintain the structure; and its sustainability is dependent upon continued interest (Wenger & Snyder, 2000).

While the strength of 'Communities of Practice' lie in their self-generation, supportive conditions and a facilitative or enabling environment for learning is essential. A key element of this is providing the 'infrastructure' for 'Communities' to develop their full potential. They require a significant investment of time and resources, including adequate budgets. Geographically dispersed 'Communities' need adequate information and communication technologies.

In terms of utilizing 'Communities of Practice' as a knowledge management strategy, Wenger (2004) has identified a series of steps for improving performance:

- Translate the strategy of the organization into a set of domains.
  - What knowledge is required to effectively achieve organizational goals?

- o The domain must connect a strategic need to the daily work and concerns of community members so they will find relevance and personal value in participating.
- Cultivate the communities according to each domain.
  - o Find the practitioners who can form a community to take care of the knowledge in their domain.
  - o Where are the relevant people? Do they know each other? Do they already interact? How can interaction be improved?
  - o How can we overcome organizational silos? How can we accommodate various levels of participation among people with diverging needs?
- Engage practitioners in the development of their practice.
  - o Support the mutual engagement of practitioners in a process of practice development. Allow practitioners to discuss the details of their practice in order to make community participation directly relevant to the work of members.
  - o How can we help practitioners organize their resources and make them easily accessible?
- Translate the learning inherent in activities into refined practices.
  - o Capturing lessons of 'learning-by-doing' and creating new practices.
- Broaden the scope of learning beyond its source.
  - o Synthesize, integrate, and disseminate learning throughout the organization and the wider 'Community'.
  - o Documenting lessons learned and 'best practices'.
- Think about knowledge strategically.
  - o Adopt a strategic stance in thinking about the domain and the development of knowledge; watch for gaps in knowledge; actively steward knowledge resources.

Reflecting on the Relevance of 'Communities of Practice' for 'Centres of Excellence'

The 'Communities of Practice' concept shares many common characteristics with the vision of 'Centres of Excellence'. In fact, the whole orientation toward building such 'Centres' may perhaps be more aptly considered an attempt to cultivate an expanded version of a 'Community of Practice', one in which learning is actively extended to new generations through training, curriculum development, and other capacity building efforts.

The domain of concern in this scoping study is self-evident. It is about the theory and practice of participatory action research and CBNRM. Pursuing this strategy is the dominant element of most potential member organizations, and where it is not, the goal is to mainstream it across the organization. The knowledge and skills that are required to achieve the goals of PAR and CBNRM are more useful and robust methodological frameworks. This need has been clearly articulated and it directly relates to the daily work of practitioners. Thus a commitment to participation exists based on relevance.

Forming a community of practice could build on an already established network among CBNRM-oriented practitioners and organizations. However, relationships would have to be further developed in order to truly engage in collective practice. Concerted efforts would have to be put forward to define membership and work toward genuine coordination of efforts. Particular attention must be paid to going beyond the natural organizational barriers that exist.

By the nature of their work, CBNRM practitioners work in highly diverse environmental, social, and political contexts. There are no standard models that might otherwise exist in business or science disciplines. Finding common themes on which to share experiences of practice is therefore essential. Practitioners must also find the means to discuss their stories, tools, lessons, and so on. This is not always easily facilitated through electronic means. Thus, practical activities are required such as face-to-face meetings, study visits, exchanges, workshops, and conferences.

Reflective learning-by-doing and improving practice is another element that should be familiar to dynamic CBNRM-oriented organizations. However, this is new ground.

Innovative ways to capture lessons from across organizational boundaries will be needed. Moreover, refining practices will require significant flexibility and adaptation for applications to be relevant to diverse contexts.

Broadening the scope of learning takes on special significance in relation to 'Centres of Excellence'. This means not only widely sharing and disseminating lessons within the broad network of organizations, but extending knowledge to individuals and organizations external to the 'Community'. This will take place through delivering curriculum, providing training, supplying resources, and so on.

Finally, a 'Centre of Excellence' as a dynamic and adaptive organizational form will be active in scanning for new opportunities to develop the domain of CBNRM. Members will evolve to be genuine stewards of knowledge resources. Collective synergies and concerted efforts to learn and improve can drive innovation and expand the discipline.

Key Resources on 'Communities of Practice'

The term 'Communities of Practice' was coined by Etienne Wenger, and he remains a pivotal figure in promoting its use. Four key resources by this author provide a further basis for thinking through relevant issues:

- *Communities of Practice: A Brief Introduction*; available at http://www.ewenger.com/theory/communities_of_practice_intro.htm
- *Cultivating Communities of Practice: A Guide to Managing Knowledge* (2002) by Etienne Wenger, Richard McDermott, and William Snyder. Harvard Business School Press.
- *Communities of Practice: The Organizational Frontier* (2000) by Etienne Wenger and William Snyder. Harvard Business Review. January-February 2000. pp. 139-145. available at : http://procop.du.nl/Bestanden/Basiscontent/Wenger-CoPtheorganizationalfrontier.pdf#search=%22%C2%B7%09Communities%20of

%20Practice%3A%20The%20Organizational%20Frontier%20(2000)%20by%20E tienne%20Wenger%20%22

- *Knowledge Management as a Doughnut: Shaping Your Knowledge Strategy through Communities of Practice* (2004) by Etienne Wenger. Ivey Business Journal. January 2004. available at http://www.knowledgeboard.com/download/1890/Knowledge-management-as-a- doughnut.pdf.pdf

'**Learning Communities**'

The final body of literature drawn upon to inform a strategy of building 'Centres of Excellence' concerns the concept of 'Learning Communities'. The term is used variously, often without explicit definition, and therefore there are several diverging areas. Insights from each are useful to a process of reflection and asking the right questions.

The broadest and most inclusive use of the concept of 'Learning Communities' focuses on the benefits that can result from creating synergies among individuals and organizations. This emphasis largely mirrors what has been already discussed in relation to 'Communities of Practice'. The central premise is that 'profits' can accrue "from building on the synergies of individuals as they work towards sharing understandings, skills and knowledge for shared purposes" (Kilpatrick et al, 2002).

Other parallels to 'Communities of Practice' also emerge within this strain of the 'Learning Communities' literature. Members of a 'Learning Community' are defined by a shared interest, similar to the 'domain' aspect of 'Communities of Practice'. The difference however is that the common interests of 'Learning Communities' tend to be more explicitly defined around a particular outcome, such as economic development, rather than around learning in and of itself. 'Learning Communities' also focus on collaboration and partnerships where shared goals can be achieved through working together and potentially creating new knowledge. Strong reciprocity, direct interaction

among members, tight coordination, a distribution of ideas and knowledge across a group, and the facilitation of creativity are all characteristics of the 'Learning Community'.

The sharing of knowledge through collaboration, as the "core business of 'Learning Communities'", draws in a constructivist approach to learning (Kilpatrick et al, 2002). This suggests that learning must be constructed by the learner who, in making sense of their experiences, tests previously held values and attitudes against those of others. A 'Learning Community' enhances the opportunity to make such tests and comparisons, which in turn lead to real changes in the learners' values and attitudes. Such changes are the basis of translating learning into new behaviour.

Considering these various aspects, a definition for a 'Learning Community' is as follows:

"Learning communities are made up of people who share a common purpose. They collaborate to draw on individual strengths, respect a variety of perspectives, and actively promote learning opportunities. The outcomes are the creation of a vibrant, synergistic environment, enhanced potential for all members, and the possibility that new knowledge will be created" (Kilpatrick et al, 2002).

Following this broad conceptualization of 'Learning Communities', Armitage (2005) suggests several key features:

- Distributed or joint control and responsibility for action
- Reasonable degree of autonomy of each member of the community
- Commitment to the generation and sharing of new knowledge
- Flexible and negotiated learning activities
- High degree of dialogue, interaction, and collaboration
- Shared goal, problem, or project to provide a common focus and incentive to work collaboratively

In several instances, 'Learning Communities' take a particularly practical slant to integrating the work of several organizations or partners around a common issue such as CBNRM. For example, an initiative known as 'Turning the Tide' supported the development of a 'Learning Community' on the theme of community based fisheries management (CBFM) in eastern Canada. The members included academic institutions, research agencies, First Nations groups, and fishermen's associations. The 'Learning Community' pursued a series of activities:

- Bringing together participants to share information and ideas and to discuss key principles, values, and issues related to CBFM
- Identifying priorities and strategies, and research needs
- Supporting educational and capacity building efforts (workshops, study tours, training courses, development of resource materials)
- Undertaking concrete activities on CBFM
- Developing regional, national, and international linkages to support CBFM (Charles, 2005)

This type of 'Learning Community' between researchers and practitioners has many benefits, including:

- The development of a common vision for research to enhance cooperation and communication among partners
- The development of a forum for sharing and learning
- The development of specific objectives and time frames
- Building multi-disciplinary teams working on common topics
- Linking initiatives around the world
- Coordinating donor funding
- Reducing duplication of research
- Using a common framework (Pomeroy, 2005)

A second line of thinking is based around a definition of 'Learning Communities' as "place-based, resource-dependent groups that have developed shared values and effective problem-solving techniques through iterative, practice-based learning" (Kearney, 2005). This geographically bound conceptualization piggybacks or at least attempts to complement the body of literature on collaborative management of natural resources. The interface of 'Learning Communities' concepts and those of collaborative management and environmental governance is interesting in terms of drawing out common 'soft' or process-related issues related to the integration of social actors and collaborative learning. Another definition of a 'Learning Community', as applied to a natural resource management context, illustrates this point:

"A 'Learning Community' is an adaptive and self-organizing group of social actors engaged in sharing perspectives, approaches, and experiences; fostering a common framework of understanding around complex socio-ecological challenges, and creating a basis for collective action" (Armitage, 2005).

Most organizations interested in building 'Centres of Excellence' in CBNRM are at least in part familiar with the processes of collaborative management. The key will be finding ways to draw out experiences with the management and facilitation of multi-stakeholder processes between social actors defined around a particular natural resource (government, private, local communities, NGOs, etc) and to turn these lessons inward to establishing effective means to manage and facilitate social interactions, collaboration, and learning among dispersed CBNRM practitioners and organizations.

Reflecting on the Relevance of 'Learning Communities' for 'Centres of Excellence'

The available literature on 'Learning Communities' provides both theory and practice that can be applied to the concept of 'Centres of Excellence'. On the theoretical side, it establishes the value of collaborative processes in terms of producing synergies for the creation of new knowledge, and how mutual learning can ingrain behavioural and attitudinal changes. This builds in key thinking concerned with 'social learning',

constructivist approaches to learning, and developing 'social capital' through learning-based interactions.

On the practical end, there are many cases where the broad concept of 'Learning Communities' is being implemented. These examples help give structure and definition to what can be done in practice to realize the benefits that theory proposes. This refers first to membership and how to involve partners in the 'Community', such as academic institutions, practitioners and their organizations, and resource-user associations. Secondly, it gets down to the specifics of activities, which is essential for defining what will actually be done to make the learning a living entity. These include face-to-face meetings, on-line discussion forums, study tours, site visits, and workshops.

Separating theory and practice also serves to highlight the variances in scope and form that can be grouped under the concept of 'Learning Communities'. The theoretical underpinnings about how individuals, groups, and organizations learn effectively together span all levels. Applying that theory to practice, however, can take a very broad level of connecting organizations across the globe, or it can take a very micro level of connecting individuals in one location. A particular form is evident in the application of 'Learning Communities' to 'collaborative management' – structuring learning among stakeholders with common or competing interests over a specific natural resource. For those interested in building toward 'Centres of Excellence', the challenge is to first define their own form and scope for collective learning and action, and to then navigate through theory and practical experiences from 'Learning Communities' to inform and guide their efforts.

Key Resources on 'Learning Communities'

Kilpatrick, Barrett, and Jones provide a valuable overview of theory in their paper *Defining Learning Communities*, available at www.aare.edu.au/03pap/jon03441.pdf. This includes a very interesting 'composite definition of learning communities', which combines collections of words so that the reader can choose their own definition.

There is significant overlap between literature on 'Learning Communities' and 'Learning Organizations'. Central principles regarding the institutionalization of continuous learning and expanding the capacity to create results with organizations is certainly pertinent to a wider form that combines a network of organizations. The leading author on 'Learning Organizations' is Peter Senge, and his seminal work, *The Fifth Discipline: The Art and Practice of the Learning Organization*, provides valuable theory that could inform 'Centres of Excellence'. A condensed discussion of the main points of this text is available at www.infed.org/thinkers/senge.htm

For discussions of where the concept is being applied in practical settings, several papers from a recent conference on 'Learning Communities' in Canada are a valuable resource:

- *Community-Based Narwhal Management in Nunavut: An Emergent Learning Community?* by Derek Armitage (2005)
- *Turning the Tide: Supporting Learning Communities for Community-Based Fisheries in the Maritimes* by Tony Charles (2005)
- *Learning Communities for Natural Resource Governance: A Concept Paper* by Robert Pomeroy (2005)

  (Available on S drive, in folder 'Learning Communities')

The Cases

Learning from real-life examples is essential to understanding how the various theories and concepts pertinent to 'Centres of Excellence' have been operationalized in practice. The following section takes a brief look at several cases of what might be considered 'Centres of Excellence' in various forms in order to inform our thinking and strategies. The examples represent a broad mix of organizational forms selected from across geographic regions.

'Centres of Excellence' for Urban Regeneration: England

In reviewing literature and searching for practical examples, a clear finding that has emerged is that there is a distinction between the process-related aspects of sharing and creating knowledge through innovative organizational forms, and the actual substantive nature of such knowledge. As such, the scope of research expanded from not only cases that focused specifically on the sharing substantive knowledge concerning participatory action research, but any knowledge area. The selection of a case example that has urban regeneration as a central focus reflects that thinking.

'Centres of Excellence' for Urban Regeneration in England were first proposed as a policy tool by the government's Urban Task Force in 1998. Given the goal of identifying causes of urban decline and creating new strategies to deal with these problems, the Task Force recommended the development of a "network of regional resource centres for promoting regional innovation and good practice; coordinating urban development training; and encouraging community involvement in the regeneration process" (de Magalhaes, 2004). The government's Urban White Paper took up this recommendation and established a clear intention to promote 'Centres of Excellence' that would involve local authorities, academic institutions, practitioners, and professionals at local and regional levels.

The underpinnings of this concept have both a theoretical and pragmatic basis. Reflecting changes in policy theory, the promotion of 'Centres of Excellence' has roots in thinking about 'governance' and how public, private, and community sectors should be combined through networks and partnerships to improve the delivery of programs. It also draws on thinking about the creation of social capital and the roles of social learning and social networks to mobilize collective action. In a pragmatic sense, 'Centres of Excellence' were conceived as an attempt to 'do things better'. This is based on the realization that problems were not being adequately dealt with by self-contained, sectoral-based activities.

Implementing the strategy began with a feasibility study to assess the skills and knowledge deficiencies of practitioners and professionals, and to subsequently determine how 'Centres of Excellence' could meet such needs and expectations. The first category involved the need for more effective delivery strategies and improving the overall quality of initiatives. Building on this was the need to overcome disjointed and fragmented approaches, and to develop comprehensive strategic frameworks. This emphasis on integration went further to a need to create connections across bodies of knowledge through multi-disciplinary teams, and the need for better partnerships. Finally, practitioners identified their own deficiencies in providing capacity building services to other actors and local communities.

This led to the articulation of three main roles or functions for 'Centres of Excellence'. First, is to serve as a "gateway to relevant knowledge and information" through such activities as providing a directory of contacts, providing information on best practices and existing research, and providing a library resource (de Magalhaes, 2004). Two key clauses come with this purpose. As providers of information, 'Centres of Excellence' must add value to what exists by synthesizing key lessons. In addition, the goal is not simply *providing* information but enhancing the ability of stakeholders to *access* it.

The second function is a networking platform for practitioners to actively learn amongst themselves. This goes beyond thinking of a 'Centre' as a place to receive training, to a vision where learning and professional development are facilitated through joint practice. These are 'decentralized' ways of improving skills and knowledge that link theory to practice and allow practitioners to keep up to date on 'cutting-edge' knowledge to improve their day-to-day performance.

The final function is a provider of support, advice, and training to local initiatives. This represents the desire to take what is collectively shared and improved upon by the association of practitioners, and to disseminate this to other actors. It is about utilizing the

converged expertise to facilitate community efforts, creating awareness, and diffusing innovative solutions that have been created through collective synergy.

The implementation of the 'Centre of Excellence' strategy has faced several challenges. Uncertainty has persisted regarding sources of funding, control and operation. Such practical elements are essential to moving the concept forward. Another major issue is the resistance that is felt in attempts at convergence when there is a very strong attachment to sectoral and disciplinary divisions. Finally, in terms of pursuing goals of knowledge diffusion and capacity building, 'Centres' are not "the only game in town" and thus need to find a particular niche so as not to replicate other efforts.

While it focuses on a completely different substantive knowledge base, the vision for 'Centres of Excellence' in this example closely mirrors our broad conceptualization. A recent paper by Soares De Magalhaes (2004) is an outstanding resource for further discussion on theory and lessons from this context. The document is available at:
http://taylorandfrancis.metapress.com/index/EPY29WE9J4KPNK51.pdf

As well, a Business Plan for a Regional 'Centre of Excellence' in East England provides valuable details on implementation:
http://www.eastspace.net/eecpe/home.asp?r=47308

Another example from West Midlands of a Regional Centre for Regeneration is available at http://www.advantagewm.co.uk/index.html

'Networks of Centres of Excellence': Canada

The Canadian government, through three federal granting agencies, supports and oversees a program initiative known as the 'Networks of Centres of Excellence.' These are unique partnerships between universities, private industry, government, and non-profit organizations whose purpose is to conduct innovative research that will contribute to the overall social and economic development of Canada. Investing in these networks is expected to lead to a number of key results:

- Stimulation of internationally competitive, leading-edge fundamental and applied research in areas critical to Canadian economic and social development
- Development and retention of world-class researchers in areas essential to Canada's productivity and economic growth
- Creation of nation-wide multi-disciplinary and multi-sectoral research partnerships that integrate the research and development priorities of all participants
- Acceleration of the exchange of research results within the network and the use of this knowledge within Canada by organizations that can harness it for Canadian economic and social development
(NCE, 2003)

This example provides a unique take on terminology. The 'Centres' themselves are the organizations that make up the partnership. They are deemed 'excellent' by the nature of their work and their reputation for distinguished research. The 'Network' refers to an "institution without walls, formed by Centres coming together to assemble a critical mass of intellectual capacity" (NCE, 2003). Our broad vision of 'Centres of Excellence' for CBNRM refers to this network level and how to take advantage of synergies in sharing knowledge resources.

The 'Networks' are driven by the principle of knowledge sharing and the central value of collective knowledge generation. The program asserts that it is "built on the premise that when innovation is shared it increases exponentially" (NCE, 2003). Partnerships between researchers are based upon multi-disciplinary teams that take a collaborative approach to solving specific problems in a variety of fields including health, manufacturing, advanced technologies, and natural resources. This approach to collective research focuses on defined outcomes, based on a belief that doing remarkable research in isolation and storing the results has little or no impact on driving the economy or improving quality of life (NCE, 2003).

There are currently 19 'Networks of Centres of Excellence'. In the field of natural resources and environment, four 'Networks' focus on aquaculture, water, sustainable forest management, and the Arctic. Abundant information on all of the 'Networks' and the program in general, including many publications, are available at: www.nce.gc.ca.
Coastal Communities Network: Nova Scotia, Canada

The Coastal Communities Network (CCN) is a valuable example of an institutionalized 'Learning Community' (although it wouldn't necessarily refer to itself using this term). Its mission is "to provide a forum to encourage dialogue, share information, create strategies and undertake actions that promote the survival and development of Nova Scotia's coastal and rural communities." CCN frames is objectives around four main components:

- A Convenor: bringing together groups and people with divergent points of view and interests; providing a safe, neutral forum for discussing issues, and seeking common ground and complementary solutions
- A Network: breaking isolation by networking people, organizations, information, and activities; providing moral support to members
- Capacity Building / Life-long Learning: providing skill development opportunities
- Rural Research: conducting research on issues identified by members; research is community-based, in that it is in response to a community need, is conducted with community members, and results are given to the community for its use

CCN implements a number of specific activities in order to ensure the knowledge sharing and learning that they strive for. These include monthly learning circles, skills development workshops, an annual learning conference, issue work, and special projects. The Network also regularly produces a magazine and other publications to disseminate their learning and activities.

Additional information about CCN can be found on their website at www.coastalcommunities.ns.ca/magazine/index.php

Community-Based Coastal Resource Management Resource Center: Philippines

The CBCRM Resource Center is a very strong example of an organization founded upon the purpose of exchanging experiences and generating knowledge, specifically for CBNRM in Asia. The concept of 'Learning Communities' is central to their work as a vehicle to bring together resource users, researchers, practitioners and advocates for the purpose of producing, disseminating, and applying knowledge. The goals of the Center capture much of what is envisioned for a 'Centre of Excellence' in terms of integrating knowledge resources, promoting innovation through coordinated efforts, acting as a source for learning, and extending knowledge through capacity building:

- To build the capacity of civil society actors in learning and knowledge management through fellows building, networking, research and publications, mentoring and capacity building, and knowledge sharing.
- To develop learning sites that facilitate the convergence of research, capacity building and knowledge sharing on CBNRM.
- To develop a vibrant, accountable, and sustainable Resource Center that is able to creatively adapt to its environment, promote cutting-edge knowledge and practice in CBNRM, and provide effective, efficient and relevant services to communities and CBNRM practitioners.

A sub-program of the Resource Center, the Learning and Research Network (LeaRN), is supported by IDRC. This expands and deepens work around 'Learning Communities', linking CBCRM researchers and practitioners in the Philippines, Cambodia, Vietnam, Indonesia, and Sri Lanka. The focus is upon generating learning from experiences or 'learning-by-doing' and how to improve practice and build shared understanding through this process. LeaRN utilizes several specific activities to achieve these goals including the promotion of participatory research through small grants, technical assistance, and

providing forums for the sharing of research results; providing mentoring and capacity building; disseminating good practices; and supporting documentation, analysis, and synthesis of experiences.

Further details and resources about the Resource Center are available at www.cbcrmlearning.org

Participatory Development Forum

The Participatory Development Forum represents a broad level of networking and knowledge sharing. It maintains itself primarily as a virtual platform, connecting practitioners, NGOs, academics, researchers, policymakers and other social actors through an on-line community. Information exchange is enhanced by targeted capacity building efforts as well. These principles are reflected in the organization's objectives:

- To share field experiences of participatory methods among practitioners, policymakers, and academics
- To encourage the adoption of alternative approaches to mainstream development
- To develop understanding of and capacity in participatory development
- To exchange information about participatory development initiatives (e.g. conferences, publications, training in participatory methodologies)
- To enhance the participation of members through virtual networking

The Forum's experiences with transferring knowledge sharing into capacity building for the substantive topic of participatory development could have significant implications for building 'Centres of Excellence'. Further information is available at www.pdforum.org.

Resource Centres for Participatory Learning and Action (RCPLA)

The RCPLA is an alliance of seventeen organizations from around the world that helps researchers and practitioners share information and experiences concerning the theory and practice of PLA. By combining resources, sharing knowledge, and building on collective capacities, RCPLA seeks to improve the implementation of PLA approaches. This is reflected in the organization's mission:

"Bring together a diverse, international network of development practitioners to strengthen impact on processes of social change. By sharing field experiences, facilitating capacity building, and encouraging the use of participatory practices, RCPLA will positively influence development initiatives while working towards qualitative social advancement, equity and justice."

RCPLA puts knowledge sharing into action through organizing workshops and seminars on PLA, providing training support, and assisting research initiatives. The broader success of sharing resources across continents has been the mainstreaming of participatory approaches, not only within member organizations but outward to local, national and international levels. The RCPLA website is found at www.rcpla.org.

Additional Case Examples

The number of organizations or networks that might reflect a broad conceptualization of 'Centres of Excellence' is endless. Given that determining the nature, form, and function of these 'Centres' is the ultimate responsibility of the direct participants, the following list of potential examples is provided for further self-exploration.

- African Centre for Technology Studies: www.acts.or.ke

- African College for Community Based Natural Resource Management: www.africancollege.edu.zm/frame.htm

- African Conservation Centre: www.conservationafrica.org

- ArcticNet (A Network of Centres of Excellence): www.arcticnet-ulaval.ca/index.php?fa=ArcticNet.showArcticNet

- Australian Mekong Resource Centre: www.mekong.es.usyd.edu.au

- Australian Research Council Centres of Excellence: www.arc.gov.au/grant_programs/centre_excellence.htm

- Canadian Water Network (A Network of Centres of Excellence): www.cwn-rce.ca/index.php?fa=CWN.showHome

- Centre for Resource Management and Environmental Studies (CERMES): www.cavehill.uwi.edu/cermes

- Centre of Excellence in Coastal Resources Management: mozcom.com/%7Eadmsucrm/home.htm

- Centre for Community Based Resource Management: http://www.coady.stfx.ca/work/cbrm.cfm

- Centre of Excellence for Youth Engagement: www.tgmag.ca/centres/index.html

- Coastal Resources Center: www.crc.uri.edu

- Comisión para la Gestión Integral del Agua en Bolivia: www.aguabolivia.org

- Community Conservation and Development Initiatives: www.ccdinigeria.org

- Fisheries Centre, UBC: www.fisheries.ubc.ca

- Grupo Randi Randi: www.randirandi.org

- International Agricultural Centre, Wageningen UR: www.iac.wur.nl/iac/index.htm

- INTRAC (International NGO Training and Research Centre); Praxis Programme: www.intrac.org/pages/praxis.html

- Mekonginfo: www.mekonginfo.org

- Natural Resources Institute, University of Manitoba: umanitoba.ca/institutes/natural_resources/index.php

- North-South Centre, Wageningen UR http://www.wi.wur.nl/UK/

- Programme for Land and Agrarian Studies: www.uwc.ac.za/plaas

- PRIA – International Centre for Learning and Promotion of Participation and Democratic Governance: www.pria.org/cgi-bin/index.htm
- RIMISP: www.rimisp.org
- Sustainable Forest Management Network (A Network of Centres of Excellence) http://www.nce.gc.ca/nces-rces/sfm_e.htm

The Way Forward

Developing 'Centres of Excellence' involves several fundamental processes:

- Integration: bringing people and their skills together
- Coordination: facilitating knowledge sharing and promoting the collective creation of new knowledge through joint practice and reflection
- Mainstreaming: developing shared understandings, approaches, and methodologies that provide a foundation for active implementation
- Institutionalization: putting knowledge management and a community of social actors in a common 'place' where learning and innovation can live for the long-term, beyond the individual
- Extending knowledge: disseminating lessons to a new generation

Achieving these objectives is a complex undertaking that will require significant commitment and investment of resources. Moreover, it will require careful and strategic thinking on the part of the actors and organizations directly involved in the initiative. It is hoped that in developing a 'way forward' to the realization of 'Centres of Excellence' in CBNRM the discussion and resources above provides valuable guidance.

Annex 1: TORs of scoping study

In consultation with the members of the RPE "Centers of Excellence" learning team (Brian Davy, Guy Bessette, Wendy Manchur, and Ronnie Vernooy), the consultant will:Carry out a global desk-review (excluding South-east Asia for which a study has been done already) of sources and resources on innovative organizational capacity development initiatives, in particular concerning the introduction, testing, assessment, and adaptation of participatory action research approaches and methods for community-based natural resource management. The review should highlight theoretical, methodological, and practical elements of these initiatives, of relevance to the concept of "CBNRM Centers of Excellence" as defined in the paper by Guy Bessette and Ronnie Vernooy (2005).

Bibliography

Armitage, D. (2005) 'Community-Based Narwhal Management in Nunavut: An Emergent Learning Community?' Discussion paper for Learning Communities workshop. Halifax, Nova Scotia. November 4-6, 2005.

Bessette, G. and Vernooy, R. (2005) 'Strengthening individual and organizational capacities for CBNRM: Towards CBNRM Centers of Excellence (a concept paper)'. Ottawa: IDRC. Unpublished.

Charles, T. (2005) 'Turning the Tide: Supporting Learning Communities for Community-Based Fisheries in the Maritimes.' Discussion paper for Learning Communities workshop. Halifax, Nova Scotia. November 4-6, 2005.

de Magalhaes, C.S. (2004) 'Centres of Excellence for Urban Regeneration: Promoting Institutional Capacity and Innovation or Reaffirming Old Ideas?' *Planning Theory and Practice*. Vol. 5, No. 1. pp. 33-47.

Eade, D. (1997) *Capacity-Building: An Approach to People-Centred Development.* London: Oxfam Publishing.

Horton, D., Alexaki, A., Bennett-Lartey, S., Noele Brice, K., Campilan, D., Carden, F., de Souza Silva, J., Thanh Duong, L., Khadar, I., Maestrey Boza, A., Muniruzzaman, I.K., Perez, J., Somarriba Chang, M, Vernooy, R., and Watts, J. (2003) Evaluating Capacity Development. Ottawa: IDRC.

Kilpatrick, S., Barrett, M. and Jones, T. (2002) 'Defining Learning Communities'. Faculty of Education. University of Tasmania, Australia.

Lopes, C. and Theisohn, T. (2004) 'Epilogue: Conclusions for Effective Capacity Development Support' in capacity.org Issue 22, July 2004.

Manicad, G. (2004) 'Facilitating Knowledge Systems Interaction in the Management of Plant Genetic Resources'. Unpublished draft document.

Manicad, G. and Franca, Z. (2004) 'Collaborative Approaches for Building Capacities in the Management of Natural Resources.' ISNAR Briefing Paper 76.

McDougall, C. and Braun, A. (2003) 'Navigating Complexity, Diversity and Dynamism: Reflections on Research for Natural Resource Management' in *Managing Natural Resources for Sustainable Livelihoods.* B. Pound, S. Snapp, C. McDougall, and A. Braun (eds.) Ottawa: IDRC.

Morgan, P. (1998) 'Capacity and Capacity Development – Some Strategies.' Ottawa: Canadian International Development Agency (CIDA).

Networks of Centres of Excellence (NCE). (2003) 'NCE Program Guide'. Ottawa: Government of Canada.

Pomeroy, R. (2005) 'Learning Communities for Natural Resource Governance: A Concept Paper.' Discussion paper for Learning Communities workshop. Halifax, Nova Scotia. November 4-6, 2005.

Ubels, J. (2005) 'A Methodological Frontier in Capacity Development' in capacity.org Issue 26, September 2005.

UNDP. (1997) 'Capacity Development.' New York: Management Development and Governance Division, UNDP.

UNDP. (2005a) 'Capacity Development: Practice Note.' New York: UNDP.

UNDP. (2005b) 'Leadership for Human Development: A UNDP Capacity Development Resource.' New York: Capacity Development Group, UNDP.

Venture Philanthropy Partners. (2001) 'Effective Capacity Building in Non-profit Organizations.'

Wenger, E. (2005) 'Communities of Practice: A Brief Introduction.' Available at http://www.ewenger.com/theory/communities_of_practice_intro.htm

Wenger, E. (2004) 'Knowledge Management as a Doughnut: Shaping Your Knowledge Strategy through Communities of Practice.' Ivey Business Journal. January 2004.

Wenger, E and Snyder, W. (2000) 'Communities of Practice: The Organizational Frontier.' Harvard Business Review. January-February 2000. pp. 139-145.

The Rural Poverty and Environment Working Paper Series

1. Rusnak, G. 1997. *Co-Management of Natural Resources in Canada: A Review of Concepts and Case Studies.*

2. McAllister, K. 1999. *Understanding Participation: Monitoring and evaluating process, outputs and outcomes.*

3. McAllister, K. and Vernooy, R. 1999. *Action and reflection: A guide for monitoring and evaluating participatory research.*

4. Harrison, K. 2000. *Community Biodiversity Registers as a Mechanism the Protection of Indigenous and Local Knowledge.*

5. Poats, S. 2000. *Gender and natural resource management with reference to IDRC's Minga program.*

6. Lindayati, R. 2000. *Community Forestry Policies in Selected Southeast Asian Countries.*

7. Meltzer, J. 2001. *Assessment of the Political, Economic, and Institutional Contexts for Participatory Rural Development in Post-Mitch Honduras.*

8. Brooks, D.B., Wolfe, S. and Shames, T. 2001. *Local Water Supply and Management: A Compendium of 30 Years of IDRC-Funded Research.*

9. Lee, M.D.P. 2002. *Community-Based Natural Resource Management: A Bird's Eye View.*

10. Sick, D. 2002. *Managing Environmental Processes Across Boundaries: A Review of the Literature on Institutions and Resource Management.*

11. Mujica, M. 2002. *Assessing the Contribution of Small Grants Programs to Natural Resource Management.*

12. Frias, G. 2003. *Invasión Forestal: Khla Nagnegei Taíñ weichangepan.*

13. Ghose, J.R. 2003. *The Right To Save Seed.*

14. Wiens, P. 2003. *The Gendered Nature of Local Institutional Arrangements for Natural Resource Management: A Critical Knowledge Gap for Promoting Equitable and Sustainable NRM in Latin America.*

15. Goetze, T.C. 2004. *Sharing the Canadian Experience with Co-Management: Ideas, Examples and Lessons for Communities in Developing Areas.*

16. Currie-Alder, B. 2004. *Sharing Environmental Responsibility in Southeast Mexico: Participatory Processes for Natural Resource Management.*

17. Suzuki, R. 2005. *The Intersection of Decentralization and Conflict in Natural Resource Management: Cases from Southeast Asia.*

18. Bruneau, R. 2005. *Watershed Management Research: A Review of IDRC Projects in Asia and Latin America.*

19. Reichrath, S. 2006. *Overcoming Inequalities in Access to Natural Resources: Experiences from Asia.*

20. Large, P. J. 2006. *Towards 'Centres of Excellence' for Community Based Natural Resource Mangement: Exploring Issues of Capacity Development for Organizations and Networks*

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