BUILDING THE CAPABILITY TO MANAGE TOURISM AS SUPPORT FOR THE AICHI TARGET

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ABSTRACT

Gazetting the tens of thousands of protected areas needed to meet Aichi Target 11 will increase the need for competent management. Many of these protected areas will rely on tourism and visitation for at least part of the funding needed for the effective management also called for in Target 11. Managing tourism and visitation requires a number of needed competencies that provide frameworks for leadership. These competencies involve strategic thinking, planning and operational domains. Given that tertiary education is unlikely to provide in the short term the kind of educational background needed, developing continuing education programmes and communities of practice can help fill this need.

INTRODUCTION

What capabilities and proficiencies do managers of protected areas need to help achieve the Aichi Target through tourism and visitation? This question is central to the global discourse about the nexus of tourism and natural heritage protection—an interface many see as potentially beneficial as it may be damaging (Bushell & Eagles, 2007). For tourism to meet its useful promise, it must be understood within a complex political, social and environmental dynamic, as one of many expectations of protected areas, that carries heightened hopes that tourism will not only provide needed funding for management but also serve as an engine of economic development and benefits for nearby residents.

These expectations exist in a world that is contentious, changing, complex and uncertain; where the future will not be like the past; where problems are wicked and messy; and where there is often little agreement among scientists about cause-effect relationships and society frequently lacks consensus on the objectives for specific protected areas. Within the protected area management field itself, there are differences about the role of tourism and the need for management. During the 2003 World Parks Conference sessions on capacity building, little mention was made of the need for capabilities to manage tourism despite the fact that tourism exists in many areas. Some managers hold that that the role of protected areas to preserve natural heritage relegates tourism to a minor use. Others are more accepting (Luo & Lawson, 2011).

Within this context, managing protected areas for tourism and visitation in a way that minimizes their negative impacts on biodiversity, enhances support for management, provides visitors with opportunities to learn about the role of biodiversity in human life and provides local residents with opportunities to improve their livelihoods is imperative. Many of the world's 157,000 protected areas now listed in the World Database on Protected Areas (World Conservation Monitoring Centre, 2012) have some potential for tourism development. Tourism management must be viewed as an integrated component in the stewardship of these areas.

The current need is large because many managers have little background in tourism and visitation and see a

International Seminar on Protected Area Management (USA) participants discuss the capacity challenges in private protected area management © Steve McCool

substantial need for greater capability (Pitkin, n.d.; McCool, 2008). The WCPA Capacity Theme description notes that, *"A particular area that requires attention is to build up the skills of staff involved in enhancing visitor experiences"* (World Commission on Protected Areas, 2012). This need will grow enormously over the next few years as countries, seeking compliance with Aichi Target 11, gazette new areas and gear up for their stewardship. In addition, the Aichi Target 11 sets a goal of effective and equitable management, which is critical to maintain a variety of park values, including biodiversity conservation (Woodley et al., 2012). Even today, perhaps only one-quarter of existing protected areas are managed with a high degree of effectiveness (Leverington et al., 2010), leaving one to wonder how effective the management of new areas will be.

Given projections for continued growth in international travel (at an average rate of 3.9 per cent per year 2010-2030; UNWTO, 2011), we expect that many of the new areas will be developed to meet this demand. For example, growing affluence in China has greatly increased visits to protected areas in Taiwan, nearly overwhelming their capability to offer high quality experiences (Hsu et al., 2011). And, given the generally acknowledged interest in nature-based tourism, visitors would likely hold expectations for experiences based in viewing, appreciating and understanding natural heritage (Carpentier, 2010). These expectations would provide a foundation for meeting several of the Aichi Targets concerning awareness of biodiversity and human impact on it. In this paper, we frame the challenge of building the professional competency needed to manage tourism in protected areas within the context of the Aichi Target. The Target itself recognizes the importance of managerial capacity in both Strategic Goal E *("Enhance implementation through … capacity building")* and in Target 11 which calls for protected areas to be 'effectively and equitably managed'.

A variety of actors are involved in managing tourism in protected areas: local businesses that provide needed services (e.g., food, transportation, lodging, interpretation); community and destination marketing organizations that promote the protected area; planners, architects, engineers and construction workers who develop and maintain facilities (e.g., roads, trails, visitor centres, toilets, overlooks); scientists who develop knowledge about the impacts of tourism and the types of experiences visitors seek at an area; other individuals who help communities and residents cope with social impacts

The demands of tourism in this private nature reserve in Namibia are perhaps focussing too much on visitor experience and not enough on species conservation © Sue Stolton

and exploit new opportunities; and management which holds the legal responsibility to protect an area's natural heritage, provide opportunities for high quality experiences and engage communities and residents in planning and management. Governance also plays a key role in that it is through governance processes that public interests are identified, debated and legislated upon. Each of these actors plays an essential part in tourism development and management. Provision of appropriate and high quality visitor experiences requires an integrated approach involving each of these players. Each actor, therefore, requires a set of proficiencies and competencies to perform in a responsible, effective and efficient manner.

Given that a basic principle of nature-based tourism development is that experiences are dependent on the attributes of the area and the values contained within it (Eagles & McCool, 2002; Eagles et al., 2002), competent management is essential not only to protection of the area but to tourism as well. For example, in Mozambique, as in many other countries, management of concessions is an important task (Spenceley et al., 2012). Management bears this responsibility while working with the unique constellation of actors involved in tourism in its region. Management must see that visitor impacts are within acceptable conditions and make possible the kinds of experiences that are appropriate for the protected area (Cole, 2004; Jager et al., 2006). Budgets are often minimal, and society is growing to expect management to be more efficient. Building professional competency is one way of becoming more efficient in decision making and implementation.

FRAMING THE CAPACITY BUILDING CHALLENGE

In order to meet the Aichi Target, capacities will be needed in a variety of domains, including governance, institutional policy, planning, managerial, and others. Enhancing management capability is a significant challenge given the dynamic character of the political, social and biophysical context in which interpretations of policy and law must be made, the potential for surprises and unintended consequences and the need to move toward resilient social-ecological systems and to share the benefits from them. For

example, a group of southern Africa universities (University of KwaZulu-Natal, Monash University South Africa, University of Namibia, and Copperbelt University) have joined with the University of Montana in creating the INSAKA consortium to build capacity to better share benefits from these systems.

A variety of competencies are increasingly viewed as essential components of capacity (Competencies Working Group, 2002). We focus here on professional competencies because it is the management agency which generally holds the legal responsibility and accountability for sustaining the natural heritage in these areas and for ensuring that day-to day-decisions are effectively implemented and the consequences are equitably distributed. Ultimately, however, the aim of capacity building programmes is to improve the effectiveness of protected area management. In the Kingdom of Jordan, for example, the Royal Society for the Conservation of Nature (who manages many of the natural reserves in the Kingdom) has developed a Nature Academy to enhance the effectiveness of protected area management in the mid-East.

In this paper, we focus on developing the capabilities of middle-level management in the conceptual, problem-solving arena rather than in the physical skill area. Building capacity is a process of communicating both physical (e.g., law enforcement, interpretation) and conceptual and critical thinking skills (e.g., reflection, understanding trade-offs, developing goals, creating alternatives, evaluating new challenges), or as Horton and others argue (2003, pg. vi), 'thinking evaluatively'. These latter capacities are the less tangible ones and include capacities to:

- Learn, focus and strategize;
- Predict, adapt and respond to volatile and ever-changing contexts;
- Motivate and inspire personnel;
- Communicate effectively with internal and external constituencies; and
- Learn and apply lessons learned to improve performance (Wigboldus et al., 2010).

Our suggestion of emphasizing critical thinking skills for protected area managers is consistent with evolving perspectives on capacity building that have ranged from institutional strengthening to training people in northern universities to physical skill development to constructing knowledge networks (Blagescu & Young, 2006). It is also consistent with growing recognition that tourism exists within a complex, adaptive system characterized by uncertainty (Farrell & Twining-Ward, 2004; Plummer & Fennell, 2009; Strickland-Munroe et al., 2010). Adapting to the surprises that are inevitable in such systems, developing responses to new expectations and demands and forging alliances for conservation requires management that encourages critical thinking, evaluation and thoughtful planning.

Middle management plays an essential role in protected area agencies, forming the, 'lynchpins of organizational change' (Luscher & Lewis, 2008, page 221; Huy, 2002) needed to respond to the new challenges and opportunities presented by the Aichi Target. Management will need to 'make sense' of these challenges, surprises and unanticipated events and frame them in ways that give rise to new insights and useful responses (Luscher & Lewis, 2008). Because many situations are likely to be ambiguous, both in terms of the problem source and its solution, abilities to engage in double loop learning are indispensable in understanding underlying trends and driving forces (Argyris, 1993).

OECD (2006, pg. 12) defines capacity development (or building) as, *"the process whereby people, organizations and society as a whole unlock, strengthen, create, adapt and maintain capacity over time"*. The UNDP (1998; pg. xiv) notes that, *"strategies that stress continuous learning are also important"* in capacity development. This approach to defining capacity building is not much different from what is found in the literature (Pitkin, n.d.; Strasdas et al., 2007) except that it focuses on development of critical thinking skills. Critical thinking involves *"reasonable reflective thinking focused on deciding what to believe or do"* (Ennis, 1993, pg. 180).

In Jordan, Nature Reserve managers identify needed topics for a new curriculum on protected area management © Steve McCool

Building capacity may involve a variety of approaches. Assuming that managers already hold a tertiary degree of some kind, such approaches include short courses and workshops, twinning, staff exchanges, conferences and symposia, mentoring, sabbaticals and educational leave. But building capacity should occur within a programme (Ackoff, 1996) rather than being viewed as an event.

Capacity building will also be tailored to the challenges and opportunities facing particular situations and regions. Each region is likely to be in a different stage of managerial development, facing different priorities, and existing within its own political, social and environmental context. For example, protected areas in Iceland (Box 1) are in a different stage of development and management than those in North America. Protected areas in Africa face a different mix of challenges and opportunities than those in Asia. And developing countries like China (Box 2) and Taiwan are vulnerable in conserving biodiversity because of 'dominant economic development discourses' that emphasize development for income and foreign exchange purposes (Luo & Lawson, 2011).

And yet, as powerful as the argument for capacity building may be, a variety of potential barriers to implementing effective capacity development programmes exist. These may include an organizational culture that does not value learning, supervisors who are concerned that educated subordinates may capture their own jobs, priorities of NGOs and development organizations that favour institutional and legal capacities over managerial ones, an event-oriented approach to capacity building, lack of adequately trained instructional staff, a pedagogical approach that is not built upon adult education principles, and paradigms of management and capacity building no longer appropriate for 21st century protected area management. Organizational learning disabilities (Senge, 1990a) often develop into an environment that provides few incentives for individuals to seek additional proficiencies, prevents application of what they may learn or does not provide opportunity for building confidence. These barriers must be addressed as part of the process to re-invent professional development within an organization.

In summary, professional capacities or competencies to manage tourism and visitation recognize the dynamic, changing and complex character of the 21st century, help management think through and reflect upon new challenges and opportunities, involve learning and problem solving skills, and prepare staff to be adaptive and skilful in the application of concepts. Building the capacity for management to achieve these competencies will be equally challenging, involve frameworks that help develop critical thinking skills and potentially cover a broad array of tourism and visitor management arenas.

TYPES OF PROFESSIONAL COMPETENCIES

While many governmental and non-governmental organizations maintain training programmes, few systematic needs assessments exist in the published literature concerning what competencies protected area managers require for addressing tourism and visitation. In

BOX 1. DEMAND FOR MANAGERS WITH INTEGRATIVE PLANNING COMPETENCIES WILL INCREASE—AN EXAMPLE FROM ICELAND

In Iceland, wilderness and natural areas are valuable for both tourism and hydro-electric and geothermal power production. During the latter half of the last century several glacier-fed rivers in the Icelandic Highlands have been dammed and hydropower plants built. Now there are plans for further exploitation at many of the major glacial rivers in the Highlands, as well as for more power plants at several of the biggest geothermal areas. Worldwide the demand for green energy is steadily increasing and recently the idea of a submarine cable connecting Icelandic to the European energy market has been revisited. If realized it will be the longest submarine cable in the world, at over 1600 km (Sæþórsdóttir and Ólafsson, 2010a). However, both power plant development and increased tourism utilize nature and reduce the naturalness of a place and requires that the development sites have to be carefully chosen (Sæþórsdóttir, 2010a; Sæþórsdóttir and Ólafsson, 2010a).

The Icelandic tourism industry has complained about being ignored when it comes to serious decisions regarding land-use planning and utilisation of natural resources, and that its economic and social significance has been overlooked. As wild and untamed natural areas are an important resource for the tourism industry (Sæþórsdóttir, 2010b), their interests need to be taken into serious consideration when planning land use in the Highlands. If the aim is to build Iceland's economy on both power intensive industry and nature-based tourism, these conflicts have to be addressed and the location of new power plants needs to be carefully planned (Sæþórsdóttir and Ólafsson, 2010b).

the following paragraphs, we describe a set of professional competencies (the things that managers do) that are needed to manage protected areas. These competencies were identified in several workshops and assessments (McCool, 2008; McCool et al., 2011; Kopylova & Danilina, 2011) through reviewing the literature, and through our own personal experience working within or with protected area agencies. We recognize that (1) no one manager can possibly hold all these competencies; (2) the competency needs will vary from area to area as the context shifts, and (3) the level of competency needed may vary as well. In listing these competencies, our goal is not to be prescriptive, but rather to provide a foundation for acknowledging that*, "we need to develop the capacity to manage not for a static world, but rather to manage adaptively in a world of continual and in some cases accelerating global change"* (Lillo et al., 2004, pg. 138).

We have identified three areas of professional competency needed: strategic, planning and operational. Strategic competencies deal with the long range—thinking about the role of a protected area and how it fits in with local, regional, national and even international needs and expectations. Planning competencies address the specific needs for integrating tourism, visitation and other protected area management goals along with addressing how the protected area can encourage economic development in a local area. Operational competencies address the day-to-day needs of managing tourism and visitation.

We emphasize here that each of these competencies focuses on the evaluative or critical thinking discussed below and would be based on appropriate frameworks for applying such thinking. Frameworks help management work through challenges, suggest questions to ask, encourage deeper understanding about trends and structures underlying individual events, and provide routes that eventually lead to solutions.

We have organized the various competencies into three categories: strategic, planning, and operational. The following discussion presents a brief overview of each competency by category.

STRATEGIC

Developing a vision for the area: While protected areas often have legislation establishing them, the values for which the area was established are often only vaguely defined. Therefore, a needed competency is the ability to articulate a more specific vision and mission. For example, the management plan for the Point Sable Environmental Protection Area in Saint Lucia envisions integration of both biodiversity protection and enhancing community livelihoods in implementing management (Gardner, 2009). This vision provides the direction and motivation for all the visitor and tourism management activity that occurs within and adjacent to the site. Building a vision that constituencies can agree to can be difficult. It requires leadership, communication skills, ability to work with various constituencies and building trust among participants in planning processes.

Visitors seeking information at Zion National Park, USA © Elizabeth Halpenny

Partnership/stakeholder outreach and engagement: Partners are essential for nearly every aspect of protected area management. Whether it is working with partners or engaging constituencies and members of civil society, managers need skills in interpersonal relationships, conflict resolution and communication. Given the emphasis recently on community engagement and working with the tourism industry to secure sustainable sources of funding, the ability to generate enthusiasm, address community concerns and respond to complaints has developed into an important proficiency. Cooperation with other government agencies, NGOs and other important constituencies is important in many places. In some situations, needed scientific support is conducted by universities or independent scientific organizations. Managers need communication skills that not only will help them understand research results, but will also be useful in communicating information needs to scientists so they conduct research valuable in addressing issues.

BOX 2. CHANGE IN MANAGEMENT APPROACH BRINGS RAPID GROWTH IN TOURISM-BASED REVENUE USED TO ENHANCE CONSERVATION

Huang Shan (or Yellow Mountain World Heritage Site in China provides one example of how approaches to management can lead to dramatic changes in revenue generation. We quote from Luo and Lawson (2011, pg. 306-307): "As one of the most beautiful and famous scenic sites in China, it has been listed as a double UNESCO World Natural Heritage and World Cultural Heritage site as well as a World Geological Park. However, it had been in debt for a long period under the centralized management system of the Chinese Government. In 1996, the Huang Shan Tourism Development Co. Ltd was established not only to charge entrance fees to the area, but also to manage its scenic areas, to run restaurants and tour agencies as well as to construct and maintain the cableways. By the end of 2000, the company had paid off the debt of 190 million RMB (approximately $30 million US) and expanded its total capital by 5.38 times with the help of money invested from the stock market. Considerable financial investment in the park enabled conservation work to be undertaken."

This change, which may or may not be appropriate in other contexts, could only come about with managers and policy-makers shifting their vision, focusing on needed competencies and experimenting with an alternative to a failing system. It required acknowledgement that then current system was no longer working and was based upon a critical assessment of what needed to be done.

Negotiation: Much of planning and management involves negotiation—working with partners, constituencies, personnel from other agencies and even politicians—to ensure that the goals established for a protected area are achieved. Negotiation may be viewed by some as compromising, but by others as seeking acceptable routes to desired ends. In many protected area situations, there may not even be social agreement about goals, in which case the manager needs to tread sensitively in working with constituencies in building consensus, not only about goals but also the various means to achieve them.

Understanding the Context: Competent decisions are made with an understanding of the social, political, economic and environmental context. Managers need to know about local and regional trends, anticipate budgetary and policy changes, and sense local community attitudes and perceptions. For example, in parts of Africa, both conventional government and traditional authorities are involved in many land use decisions. Their respective roles must be understood in many protected area problems (Ntsebeza, 2004). In other settings, some decisions may incidentally favor some groups or villages over others, potentially creating a sense of unfairness. Past dealings with a protected area agency may have led to feelings of distrust (Stern, 2008).

Innovation and Entrepreneurship: Domestic and international funding for protected areas development has been declining since the 1990s (Emerton et al., 2006). The significant increase in the level of public debt in regions such as the Caribbean (Sahay, 2005), suggests that there will be further reduction in government funding support for protected areas management. The global financial crisis that started in 2007 has resulted in increasing public debt and austerity measures in even the more developed countries, with forecasted adverse impacts on protected areas staffing and operations. In the face of this trend, coupled with the rising and broadening expectations of

A workshop involving the private sector in World Heritage site tourism management (Switzerland), managers and tour operators engage in a lively debate about roles and needed professional competencies © Steve McCool

Participants in the International Seminar on Protected Area Management (USA) discuss management of wildland fire next to communities © Steve McCool

protected areas, managers must be creative in protecting biodiversity and in providing opportunities where appropriate for high quality visitor experiences. For example, the Finland protected area authority, Metsähallitus Natural Heritage Services, applied the concept of Limits of Acceptable Change, and at the same time created two progressive quality programmes, Green Destination Quality Net (Green DQN™) and Green Destination Management Net (Green DMN®), which effectively bring together local actors from the tourism industry and the nature conservation field to promote sustainable tourism (Tapaninen, 2010).

PLANNING

Integrating Development and Protection: Undoubtedly, many of the sites designated to meet Aichi Target 11 will be located within IUCN's categories of V (Protected Landscapes/Seascapes) and VI (Protected Area with Sustainable Use of Natural Resources), simply because many areas of the earth that are not now formally protected are occupied or used as sources of natural resources and ecosystem services. Gazetting these sites will likely not involve removal of local populations to the extent that has been conducted in the past. Designation then will require more consideration of how developmental needs for sustenance, shelter and employment can be integrated into the protection mission. A particular thorny question involves competition between tourism and other resource uses—competition that is likely to intensify as demand for ecosystem services accelerates (Box 1).

Knowledge of facility and infrastructure design and construction: If a vision gives us guidance of where to go, developing infrastructure and facilities for visitor use and tourism is one of the pathways to get there. Infrastructure involves roads, highways, trails, visitor centres, administrative facilities, maintenance sheds, toilets, sewage treatment, water systems, signs, parking lots, computer networks and intelligent transportation systems. Knowledge of this technology and the requirements for construction and development is a fundamental requirement of a competent site manager.

Not only must a manager understand how such development would proceed, but awareness of maintenance is also a part of the needed skill set.

Considerations of operational costs and maintenance have to be factored into the design and siting of facilities. In addition, there is a greater awareness and constituency demands for facilities to be 'green' or made using sustainable processes and local materials to reduce carbon footprints.

Visitor use and tourism planning: Developing and implementing plans for visitors and tourism is a challenging task, often occurring within a dynamic, contentious setting. Managers must often make decisions between competing goals–protecting biodiversity, but also allowing access for visitors to understand, appreciate and enjoy it. Given the rate of change in technology and social preferences, critical thinking skills are needed to ensure plans are adaptive and responsive to shifts in visitor behaviour that are currently unanticipated. Nearly all protected areas require some level of competency in developing and implementing visitor use plans.

Making tradeoffs among competing goals is not an easy task, and requires not only technical information about the consequences of varying tradeoffs but a variety of value judgments about the social utility, costs and benefits of differing scenarios. Aichi Target 4 deals in part with reducing impacts of use of natural resources; good tourism planning reduces impacts through siting facilities and encouraging appropriate visitor behaviour.

Planning requires both technical skills (including knowledge of visitor preferences, expectations and use patterns) and public engagement proficiencies, including negotiation. Knowledge of value systems, the interplay of biodiversity with other site values, and the consequences of varying alternatives on communities and values are important proficiencies in the manager's repertoire of planning skills. Planning for visitation also includes understanding the key interpretative messages to be delivered to visitors.

An example may be the dramatic changes in youth participation in nature-based activities brought on in part by new technologies. It is important that managers are prepared to make decisions with respect to increasing demands for access to cell phone and internet in protected areas and the potential conflicts originated between different groups of visitors as a result of this situation. Managers also need to be prepared to understand this new reality in order to be able to create, evaluate and develop alternatives to the engage young urban clientele whose focus is on technological forms of recreation, and exploit these interests to stimulate enjoyment of protected areas.

Education and interpretation: This competency is significant given Aichi Target 1, Building Awareness of the Value of Biodiversity. Presentation of the biodiversity and natural values within an area requires that information about them be provided to visitors and other constituencies. This is commonly done through provision of educational and interpretative programmes that usually involve naturalists/guides, signage, visitor centres, trails, brochures and electronic media. Such programmes provide visitors with the opportunities not only to learn about the values contained within the site, but also to appreciate them. Further, interpretation often has an inspirational component, where visitors are encouraged by the programme to seek additional information or even take action for protection of the visited site or other sites.

While many sites do have active educational programmes, changing contexts have raised new questions, issues and opportunities about how interpretative material can be presented. For example, can a site set up a not-for-profit and administratively separate educational institute? This type of institute may provide educational programming, such as courses, not normally within the purview of agency regulation.

Monitoring: Monitoring may be defined as the periodic and systematic measurement of indicator variables, tabulation of the resulting data and evaluation of the data to determine trends and if actions are needed. Monitoring is involved in a variety of contemporary notions such as adaptive management, Limits of Acceptable Change and the Visitor Experience and Resource Protection visitor planning frameworks (McCool et al., 2007). Protected area managers should have knowledge of the 'theory' of monitoring, how to capture the information gained and how to modify a visitor use plan if needed (Hsu & Li, 2011).

Data could include spatial and temporal patterns of visitor use; impacts of visitors on World Heritage areas of outstanding universal value or on visitor experiences and the biophysical condition of the area; attitudes and beliefs; and demographic characteristics of visitors.

OPERATIONAL

Revenue generation mechanisms: Many protected areas lack adequate and sustainable sources of funding needed for their stewardship. Given that management of

The awarding winning Napo Lodge within the Yasunì National Park, Ecuador © Nigel Dudley

these areas requires a substantial infusion of funding to support operations needed to protect values contained within them, managers should have an awareness of the alternative mechanisms for raising and generating revenue. Of primary interest are methods of raising funds from tourists and the tourism industry which would help in achieving Aichi Target 20 which calls for enhanced financial resources devoted to conservation. Generating revenue also encompasses enhancing economic opportunity in the local area, particularly for vulnerable populations, which is partly reflected in Aichi Target 2. An example of one site's experience in revenue generation is depicted in Box 2.

Concessions (such as lodges and tour guides) capitalizing on increasing demand for nature-based experiences are examples of methods to increase revenue to protected area organizations. But managing concessions is an often challenging task, requiring not only legal expertise, but knowledge about business practices as well (Spenceley et al., 2012). Poorly designed concessions agreements are found nearly everywhere, with loopholes, unfair competition, and potential for corruption possible, for example as fee revenues may become 'lost' in various exchanges or in monitoring of contracts (Eagles, 2009). As such, Buckley (2010) suggested that parks agencies need to exercise caution in political negotiation, and apply practical tests of sincerity to tourism enterprises who want to operate there.

Administration, human resource management/ staff capacity building, and leadership: The management organization varies from small, nearly single person staffs, to very large organizations that may have hundreds of employees in a variety of divisions and departments. Administering this organization, regardless of size, is ultimately the manager's responsibility. Much of this administration has to do with human resource management (e.g., hiring, advancement, and evaluation), building the technical competency of the staff itself and providing overall leadership and even inspiring the staff to keep it operating at a high level of productivity.

Leadership is an important quality of an effective site manager. But there are real questions about training people to be inspirational, courageous and visionary. It is more realistic to expect managers to hold abilities to structure organizational environments that encourage employees to do their best, to work with staffs in identifying strengths and weaknesses, and in implementing strategies to deal with administrative and human resource issues.

Senge (1990b, pg. 9) argues that the leader's 'new work' is building a learning organization. These leaders, Senge notes, *"are responsible for building organizations where people are continually expanding their capabilities to shape their future—that is leaders are responsible for learning."* Senge's vision of leadership is thus central to a

functioning, efficient and productive protected area organization in the 21st century, where professional staff members are encouraged to gain the competencies to deal with complexity, change and uncertainty.

Financial management and business planning capacity: Protected areas, as noted above, require funding to support operations and infrastructure development. Regardless of the source of funding, the expenditure of funds must be directed by accepted financial management practices. Such practices, actually good business principles, are fundamental to efficient and appropriate use of the funds available, ensuring they are spent on appropriate materiel, personnel and services. Thus, understanding financial management principles and processes is an important skill needed at the site management level.

In addition, since many protected areas are managed by public agencies or parastatal organizations, there is a need for transparency and accountability in spending of funds. This means that financial management and spending procedures must be open to public scrutiny and regular audits. Transparency of the financial management systems is an increasingly important issue, as more protected areas are being managed by non-governmental organizations, which traditionally are not required to meet the same standards as public agencies.

Marketing: Marketing is an important technical proficiency needed by managers. While marketing is commonly miscast solely as promotion, it is about making connections between people and the products (the experiences with natural heritage) they desire. Marketing involves the 4-"Ps": price, product, promotion and place. To implement a successful protected area marketing programme, site managers need some understanding of how these fit together in a comprehensive and systematic manner.

Because marketing strategies also affect the viability of the tourism industry, managers need to understand how the industry is structured (e.g., tour operators, wholesalers, etc.) as well as their views about the viability of different market segments. Thus, working with the tourism industry is an essential part of developing a marketing strategy. Understanding branding, for example, can help sites produce greater revenues, protect values, and influence visitor expectations and behaviour at World Heritage Sites (King et al. this issue).

Regulation and enforcement: Protected areas are by definition different than the areas within which they are situated. Visitors entering them are subject to a number of sanctions and norms that are different from their homes. Rules, regulations and codes of ethics are all designed to preserve the values contained in the area. Managers need to hold proficiencies with regard to development of rules or alternative actions that are appropriate to protect these values. Administrative procedures are important technicalities in development of rules and penalties when rules are broken. Managers must communicate to agency counsel the need for certain rules and the behavior that should be prohibited.

Enforcement of rules is an art and skill itself. Should violators be treated in a 'heavy-handed' manner? Should rangers and wardens seek to understand reasons for violations? Should there be an educational component to an enforcement action? Therefore, managers need proficiencies in developing an enforcement approach that is effective, but respectful and gentle at appropriate times, emphasizing education and information. However, in the case of the cost of the enforcement exceeding the revenue it raised, managers may consider the issue of equality and allow access for all instead of insisting on cost recovery (Hughes & Carlsen, 2011).

A final aspect of site regulations is that dealing with guiding and tour operators. What licensing is required? Who can provide guiding services? What quality assurances are there for visitors when selecting guides? What conditions are required for an operator to enter? What about use fees? This set of regulations requires substantial technical proficiencies, as raised earlier, in dealing not only with the tourism industry, but understanding visitor experiences and developing an appropriate and effective regulatory environment.

BUILDING A COMMUNITY OF PRACTICE

The competencies described above enable managers to meet the challenges of their jobs, to think and reflect critically on the inevitable problems and opportunities arising in the course of protected area stewardship and frame problems in ways in which they can be resolved. However, enabling a manager and achieving more effective and efficient levels of performance are two different things.

The wide diversity of needed competencies will challenge even the most learning-focused organization. Managers need help in testing ideas, experimenting with various

visitor management approaches, applying research and otherwise wrestling with complex and dynamic situations. A community of practice can provide that help. Wenger and Snyder (2000, pg. 139) define such communities as, *"groups of people informally bound together by shared expertise and passion for joint enterprise"*. Improving performance in a community of practice is facilitated through voluntary engagements, critical discourse, shared experiences and *"creative ways that foster new approaches to problems"* (pg. 140). The output is enhanced knowledge and learning, something difficult to quantify and measure.

A community of practice, as Wenger and Snyder (2000) state, is not a team within an agency nor a formal work group initiated to develop a product, service or policy. What makes a community of practice distinctive is the passion with which members pursue learning and excellence in a voluntary way. Such a community of practice including managers, scientists and non-governmental organizations operating on a regional basis, would increase confidence and raise the skill with which decisions are made. Developing and maintaining a community of practice works only if membership is voluntary and potential members share a commitment to learning.

Communities of practice make good complements to formalized continuing education and professional development programmes; in a sense they serve as a kind of 'help line'. Achieving the Aichi Target will require tens of thousands of new managers, many with responsibility in managing tourism and visitors. Tertiary education does not have the capability of delivering this number of appropriately trained people over such a short time frame. Communities of practice coupled with well-structured continuing education programmes are two ways of qualifying the needed management expertise.

Building opportunities for managers to gain the competencies and critical thinking skills will require organizations committed to not only protected area management but also to inculcating a culture of learning. Organizations, such as Brazil's Instituto Chico Mendes de Conservação da Biodiversidade (which manages nationally designated protected areas in Brazil) with active professional development programmes are more likely to succeed. Jointly operated continuing education centres—involving both universities and agencies (or NGOs)—balance the practical with the conceptual and encourage debate and the critical thinking essential for double loop learning.

Few continuously active capacity building programmes exist. The Center for Protected Area Management and Training located at Colorado State University in the U.S. offers a month-long Spanish language course in management. Offered for over 20 years, the course emphasizes operations, ecosystem services, administration and leadership, and climate change. A similar course, offered in English for three weeks is coordinated by the universities of Montana and Idaho in the U.S. Operating for over 13 years, it emphasizes transboundary planning and climate change, integrated planning, community engagement and tourism management. Both courses are field oriented and are sponsored by the U.S. Forest Service. USAID and the U.S. National Park Service have sponsored more specific seminars concerning concessions management.

With bureaucracies evolving to be focused on a more horizontal and less vertical style of decision-making, professional staff must hold the critical thinking skills to make informed decisions. Relying on tourism and visitation will require management be competent in that area to ensure opportunities for quality experiences, minimize impact, and appropriately administer concessions and operators. Protected area bureaucracies can provide the discretion for these decisions, but must also arrange for staff to hold the competency to do so. Perhaps only about one-fourth of the world's protected areas are managed effectively (Leverington et al. 2010). We cannot afford to embark on preserving the remaining biodiversity only to find our efforts have not been effective.

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RESUMEN

La declaración oficial de decenas de miles de áreas protegidas necesarias para cumplir con la Meta 11 de Aichi aumentará la importancia de la buena gestión. Muchas de estas áreas protegidas dependerán del turismo y las visitas para la generación de buena parte de los fondos necesarios para la gestión eficaz que también exige la Meta 11. La gestión del turismo y las visitas precisan de una serie de competencias para facilitar marcos de liderazgo. Estas competencias suponen pensamiento estratégico, planificación y ámbitos operativos. Dado que es poco probable que la educación superior pueda proveer en el corto plazo el tipo de formación académica necesaria, el desarrollo de programas de educación permanente y la creación de comunidades de prácticas pueden ayudar a satisfacer esta necesidad.

RÉSUMÉ

La reconnaissance officielle de dizaines de milliers d'aires protégées pour répondre à l'Objectif 11 d'Aichi augmentera en conséquence les besoins en gestion compétente. La plupart de ces aires protégées s'appuieront sur le tourisme et la fréquentation pour au moins une partie du financement nécessaire à leur gestion, également préconisé dans l'Objectif 11. La gestion du tourisme et de la fréquentation demande un certain nombre de compétences indispensables qui offrent des cadres de direction. Ces compétences incluent la pensée stratégique, la planification et les domaines opérationnels. Il est peu probable que l'enseignement supérieur offre, à court-terme, les compétences éducatives nécessaires. Il est donc indispensable de développer des programmes de formation continue et des communautés de pratique afin de répondre à ce besoin.