

Trade-offs among multiple goals for transboundary conservation

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“[We must] think beyond boundaries, beyond ethnic and religious grounds and beyond nations in our global quest for a just world that values and conserves nature.”

Excerpt from the opening address made by HM Queen Noor of Jordan at the Vth World Parks Congress, Durban, September 2003

“It is only through alliances and partnerships that protected areas can be made relevant to the needs of society.... We are in the process of laying the groundwork for very exciting partnerships in the field of transboundary conservation ...The plans for transboundary protected areas that have been laid now will need to be carefully developed and implemented before they will finally and fully bear fruit.”

Excerpt from the opening address made by Nelson Mandela at the Vth World Parks Congress, Durban, September 2003

Introduction

World leaders reflected enthusiastically on contemporary trends in nature conservation at the landmark 2003 World Parks Congress, which has as its theme “Benefits Beyond Boundaries.” Transboundary conservation, in particular, was highlighted extensively as a new frontier in conservation and development practice due to the possibility of simultaneously achieving biodiversity, socioeconomic, and peace and security goals. During and after the Congress, however, practitioners and commentators on trends in transboundary conservation emphasized the need for a more thorough interrogation of the rapid increase in transboundary conservation programs in relation to their purported benefits and the achievement of their multiple goals. In this short discussion, we hope to highlight some of the contemporary trends and questions that are the sources of debate and deliberation.

Transboundary natural resource management is generally regarded as a relatively recent phenomenon, despite historical evidence that it has occurred wherever resources that span national or other jurisdictional boundaries are managed cooperatively. There are indeed numerous examples of long-standing cooperative resource management arrangements in river basins, lakes, marine areas, and mountains throughout the world, involving local communities and other authorities in traditional heritage territories (Singh, 1999). Whereas many of these arrangements regulate competitive resource use and therefore support peaceful cooperation among communities, there is often also an underlying conservation purpose (i.e., to secure both long-term equity and sustainable use).

During the past 50-80 years—possibly as a result of increasing global demand for natural resources, but also because of increased international attention on sovereign rights and obligations of states (Singh, 1999)—the number and complexity of formalized transboundary natural resource management arrangements and agreements between countries has increased, particularly for key shared resources such as water and fisheries. In addition, such arrangements

DRAFT

have also grown where protected areas are adjacent and cross an international boundary. A growing body of literature discusses the objectives and practice of transboundary natural resource management and transboundary conservation (e.g., van der Linde et al., 2001a).

There have been few attempts to analyze the principles and practice of transboundary natural resource management, which the Biodiversity Support Programme defined in 1999 as “any process of cooperation across boundaries that facilitates or improves the management of natural resources (to the benefit of all parties in the area concerned)” (Griffin, 1999). This description exposes, but also masks, an inherent conflict that exists between the sovereign interests of the nation states (and their citizens) on the one hand, and, on the other, the tenure, rights, and livelihoods of local communities who straddle these borders. There is, in addition, the possible impact of large-scale—even global—purposes that subsume the interests of local people, often far from the centers of national, regional, or global power.

Objectives of transboundary conservation initiatives

Transboundary natural resource management has also found support and practical application for conservation and wilderness preservation purposes. Whereas the protected area estate has performed relatively well in securing representative samples of biodiversity pattern (distribution of species, communities, and ecosystems), it remains inadequate for conserving the ecosystem processes that will secure either the protected areas or biodiversity in the wider landscape. Multiple-agency, landscape-level approaches (the ecosystem approach) can help resolve this problem. The World Parks Congress reflects an apparent paradigm shift: that conservation, itself embedded within the sociocultural milieu of the place, must deliver socioeconomic benefits to society. When this new paradigm is applied in the transboundary context, it reveals a complex set of goals and associated actors, including:

- biodiversity conservation;
- cultural heritage and exchange;
- international cooperation;
- maintenance of peace and security;
- promotion of sustainable development;
- regional economic integration;
- restitution of land tenure;
- local economic development; and
- poverty alleviation.

Worldwide, an impressive array of transboundary conservation initiatives is being implemented on virtually all continents and countries. At least 188 transboundary conservation areas, spanning the borders of 122 countries, have followed the declaration of the Waterton-Glacier International Peace Park in 1932 (Besançon and Savy, 2005).¹ This grand-scale experiment reflects a range of methods of implementation, expression, and achievement of all or some of the objectives given above. This makes it difficult to define “transboundary conservation” precisely, and identify how best to undertake it. In the light of increasing support for transboundary conservation initiatives from national states, international conservation organizations, and bilateral and multilateral donors, several efforts have attempted to review practice, propose organizing frameworks, and provide advice for implementation.

¹ For a review of the development of transboundary conservation initiatives, see Sandwith, et al. (2001).

DRAFT

Developing guidance for transboundary conservation initiatives

Significant leadership in developing guidance for transboundary conservation has been provided by IUCN (Sandwith et al., 2001), EuroParc Federation (1993), UN Environment Programme (e.g., Westing, 1993), the Biodiversity Support Program (e.g., Griffin, 1999; van der Linde et al., 2001b) and InWent (e.g., Braack, 2003). Leading eco-regional programs that include transboundary practice are being coordinated or implemented by World Wildlife Fund, International Tropical Timber Organization (ITTO), UNESCO's Man and the Biosphere (MAB) Program, UNESCO World Heritage, and Conservation International's Hotspots Program, and regionally by The Nature Conservancy, EuroParc Federation, and the African Wildlife Foundation. Global initiatives have received sustained funding from the Global Environment Facility through the World Bank and UN Development Programme; USAID; ITTO; InWent; Italian Development Cooperation; Swiss Development Cooperation; and Peace Parks Foundation, among others, in addition to extensive donor support for specific projects at the site level.

These efforts reached a peak during and immediately after the World Parks Congress, at which the IUCN/WCPA Transboundary Protected Areas Task Force launched a global program and facilitated the inclusion of specific recommendations that have subsequently been included in the Convention on Biological Diversity's Seventh Conference of Parties' Programme of Work on Protected Areas, and adopted by the World Conservation Congress with specific goals and targets in the Durban Action Plan.²

A paradigm shift?

The paradigm shift explored at the 2003 World Parks Conference is deeper; fundamentally, transboundary conservation seeks to mainstream biodiversity into social and economic development at the landscape level. What are the means and what are the ends in this scenario? For some, mainstreaming biodiversity ensures that social and economic development is harnessed to secure biodiversity for future generations. For others, mainstreaming biodiversity demonstrates that the appropriate management and use of biodiversity underpins social and economic development. Several commentators have pointed out that mainstreaming occurs when "win-win" solutions are found; when conservation is not at the expense of development, but when clear tradeoffs among objectives lead to a net overall gain (Pierce et al., 2002). Critiques of integrated conservation and development programs have concluded that attempts to achieve multiple objectives may result in realizing neither conservation nor development objectives (e.g., Wolmer, 2004). The purpose and practice of transboundary conservation falls squarely within this area of debate, however, since its apparently self-evident benefits appear to outweigh the largely unidentified costs. Yet, questions remain regarding the quality and quantity of benefits; who benefits and who bears the costs; and whether it is possible to achieve all of the positive outcomes without some inherent tradeoffs among objectives, whether spatially, temporally, or sectorally.

Transboundary conservation practice may now be well enough advanced to offer perspectives on outcomes, yet there is a dearth of analysis and interpretation of this practice. Most writing on the subject is speculative and not grounded in factual analysis of case studies or supported by adequate baseline information. Key interest areas for the IUCN/WCPA Transboundary Protected Areas Task Force and the emerging transboundary conservation community: the purpose and scope of transboundary conservation practice; legal and institutional frameworks; organizational and implementation arrangements; governance and community participation; peace and security

² For more information, see <http://www.tbpa.net>

DRAFT

impact assessments; measurement, monitoring, evaluation, and research; and knowledge networking. It is impossible to reflect on the full scope of issues in this commentary, but current work has focused on two areas that might usefully contribute to the ongoing discussion:

- (i) Developing a typology of transboundary conservation practice; and
- (ii) Assessing the role of transboundary conservation in peace and conflict issues.

A proposed typology of transboundary conservation practice

At a workshop arranged by the IUCN/WCPA Task Force on Transboundary Protected Areas, an expert group (Braack et al., in prep) was convened to develop a proposed typology for transboundary conservation initiatives. Although not in itself of concern, the growing number of terms and definitions can mitigate against the development of a broad-based understanding of the nature of transboundary conservation and can hinder communication and any comparative analysis of best practice and lessons learned. We propose this typology as an organizing framework for transboundary conservation and development initiatives.³ Four main types are described below, drawing on perspectives from the literature and existing case studies:

- (i) Transboundary protected areas;
- (ii) Transboundary conservation areas;
- (iii) Parks for Peace; and
- (iv) Transboundary migratory corridors

(i) Transboundary protected areas

Protected areas that adjoin across an international boundary, and that involve cooperative management, are the most easily defined of transboundary conservation initiatives. Examples of these include La Amistad International Park between Costa Rica and Panama, the Kgalagadi Transfrontier Park between Botswana and South Africa, and the Neusiedler See/Seewinkel - Fertő Hanság Transfrontier Park between Austria and Hungary.

Sandwith et al. (2001) defined transboundary protected areas as follows:

“A transboundary protected area is an area of land and/or sea that straddles one or more borders between states, sub-national units such as provinces and regions, autonomous areas, and/or areas beyond the limit of national sovereignty or jurisdiction, whose constituent parts are especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed cooperatively through legal or other effective means.”

Other terms which have been used in the literature include “transboundary parks” (Kenney, 1990), “cross-border parks” (McNeely, 1993), “transfrontier protected area complexes” (Zbicz and Green, 1997), “adjoining protected areas” (Zbicz and Green, 1997) and “transfrontier parks.” In each of these cases, the constituent areas are protected areas, although “adjacency” does not necessarily imply any effective cooperation as is required by the definition of transboundary protected area given above.

³ The term “transboundary conservation and development initiatives” represents the broad scope of partnerships ranging from very local level initiatives with narrowly circumscribed objectives, to large-scale global initiatives involving many nations with wide-ranging objectives.

DRAFT

(ii) Transboundary conservation and development areas

There are extensive examples of transboundary conservation initiatives where protected areas may be, but are not necessarily, a feature of the regional landscape, but where conservation and sustainable development goals have been asserted within a framework of cooperative management. Examples of transboundary conservation initiatives in this category include the Maloti-Drakensberg Transfrontier Conservation and Development Area (Lesotho-South Africa); the cooperation between the Palatinate Forest Nature Park – Northern Vosges Regional Natural Park (Germany-France); Sungai Kayan Nature Reserve and the proposed Pulong Tau National Park (Indonesia-Malaysia).

In their study of transboundary conservation initiatives in sub-Saharan Africa, van der Linde et al. (2001) define “transboundary natural resource management” (TBNRM) as being “any process of collaboration across boundaries that increases the effectiveness of attaining a natural resource management or biodiversity conservation goal.” The concept is applicable to “transitions across geographical, legal, and land-use borders” at any scale, although they use the term in more limited situations across international borders.

The Southern African Development Community (SADC), a cooperative clustering of 14 nations, has formally adopted the term “Transfrontier Conservation Areas” (TFCAs), which it defines in the SADC Protocol on Wildlife Conservation and Law Enforcement (1999) as “the area or the component of a large ecological region that straddles the boundaries of two or more countries, encompassing one or more protected areas, as well as multiple resource use areas.”

It therefore becomes useful to include in the typology a category that describes this situation, but which could apply internationally and complement the designation of Transboundary Protected Areas. We propose to define transboundary conservation areas as follows:

“Transboundary conservation (and development) areas are areas of land and/or sea that straddle one or more borders between states, sub-national units such as provinces and regions, autonomous areas, and/or areas beyond the limit of national sovereignty or jurisdiction, *whose constituent parts form a matrix* that contributes to the protection and maintenance of biological diversity, and of natural and associated cultural resources, *as well as the promotion of social and economic development*, and which are managed cooperatively through legal or other effective means.”

(iii) Parks for Peace

Some transboundary conservation initiatives have the explicit objective of securing or maintaining peace during and after armed conflict, or of commemorating a conflictual past. The term “peace park” has been used to describe these situations, but this term is rather loosely applied to all sorts of situations, such as memorials in city parks and battlefields. To ensure a more consistent application of terms to situations where both conservation and peaceful cooperation are goals, Sandwith et al. (2001) defined Parks for Peace as follows:

“Parks for Peace are transboundary protected areas that are formally dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and to the promotion of peace and cooperation.”

DRAFT

Examples of such Parks for Peace include the Si-a-Paz project (Costa Rica – Nicaragua), and a similar initiative between Ecuador and Peru along a portion of their common border. The Waterton-Glacier International Peace Park (Canada – USA) symbolizes the peace and collaboration that exists between these two countries.

(iv) Transboundary migratory corridors

The final group of transboundary conservation initiatives includes situations where the habitat requirements of species include areas in several countries, such as a migratory route. These migration routes could involve two or more adjacent countries for the seasonal movement of elephants, for example, or might constitute the feeding, resting, or breeding areas of a migratory species, such as birds, sea turtles, or whales.

We propose to define transboundary migratory corridors as follows:

“Transboundary migratory corridors are areas of land and/or sea in two or more countries that are not necessarily contiguous, but are required to sustain a biological migratory pathway, and where cooperative management has been secured through legal or other effective means.”

Examples of such transboundary initiatives include the Palearctic Flyway (Siberia to Senegal), European Green Belt, and the Meso-American Corridor.

General considerations

It should be noted that these four types are not mutually exclusive, and may not be inclusive of all situations prevailing worldwide. They do, however, accommodate the majority of situations of which we are aware, but new types and strategies will likely emerge in the future.

These proposed definitions and designations are descriptive and are not intended to replace or become official designations at this stage. It should be noted that in addition to these types, there are two other official designations of transboundary conservation initiatives, which can be superimposed on any combination of the above four types, namely:

- (i) Transboundary World Heritage Site, where protected areas on either side of an international boundary fall collectively into the designation of the area as a World Heritage Site. These initiatives are likely to be a small subset of Transboundary Protected Areas; and
- (ii) Transboundary Biosphere Reserve, where areas on either side of an international boundary fall within a biosphere reserve designated under UNESCO’s Man and the Biosphere program. Transboundary conservation areas (as defined above) conform most closely to the concept of a biosphere reserve, provided they meet UNESCO’s designation criteria (UNESCO, 2000).

The need for better definitions of transboundary conservation initiatives is a moot point. While some dismiss this as an unnecessary exercise in “splitting hairs,” the continued use of a range of terms could engender an uncooperative response to transboundary conservation. These suggestions from the IUCN/WCPA Transboundary Protected Areas Task Force are consequently offered as a way to clarify the issues and circumstances in an effort to encourage cooperation.

DRAFT

Assessing the potential for transboundary conservation to contribute toward peace

“I know of no political movement, no philosophy, no ideology, which does not agree with the peace parks concept as we see it going into fruition today. It is a concept that can be embraced by all” —Nelson Mandela

Interest in the potential for transboundary conservation to contribute toward a culture of peace and cooperation has grown immensely in the past few decades. Politicians, conservation organizations, and governments have latched on to the idea that conservation can contribute to the achievement of multiple goals simultaneously. Peace parks have been established in many parts of the world already, and are being proposed in many contentious places, including the demilitarized zones between the Koreas, between Kuwait and Iraq (Alsdirawi and Faraj, 2004), and in the Kashmiri region at the border of India and Pakistan (Siachen Glacier).

Supporting the rationale that transboundary conservation may promote cooperation between nations is the idea that environmental stress creates favorable conditions for countries to work together to solve mutual problems (Brock, 1991). This idea has received a recent boost from new work coming out of the environmental security field. Rather than concentrating on the potential for environmental problems to create negative interactions between countries, the concept of “environmental peacemaking” instead views these interactions as the building blocks for future cooperation (Conca and Dabelko, 2003). Though far from reaching maturity, environmental peacemaking shows great promise as a way to advance our understanding of the intersection of international relations and environmental issues. Being able to assess the favorable conditions under which countries are likely to engage with one another over environmental issues for mutual benefit may enable us to design robust institutional structures and processes capable of facilitating progress. Unfortunately, scientifically based assessment frameworks have been sorely lacking until very recently.

Complicating and perhaps confounding the development of peace and cooperation assessment is the fact that, in some cases, conservation may itself be an instrument of conflict, especially when the implementation of conservation strategies impinges on the rights of local people or limits their options to pursue livelihood strategies in times of stress. In transboundary situations, these impacts can extend across national boundaries, engendering conflict at a number of different levels, from national to local. It is also possible that efforts to promote peace at a political level may inadvertently promote conflict locally, or vice versa. The World Parks Congress, recognizing this inherent tension in the concept of peace parks, called for additional conceptual development that could not only assess the contribution of transboundary conservation to peace and conflict, but also help to promote conflict-sensitive approaches to conservation.

Contributions from the aid and development sectors

Interest among the aid and development sectors in the development of stronger frameworks for assessment of peace and conflict impact has increased. Two main factors are responsible: First, driven by donor demand for greater accountability and efficiency, NGOs have implemented results-oriented frameworks for measurement and evaluation of projects and programs. Second, during the 1990s, numerous conflicts erupted around the world that called into question the conventional paradigm of aid and development. Some of the organizations and institutions active in peacebuilding and development work have matured to the point that they have begun to reflect on their past experiences and to distill lessons learned. In some cases, certain programs with peacebuilding objectives were actually fuelling conflict, rather than reducing it (Schmelzle, 2005, p. 2; Menkhaus, 2003, p. 2). This situation led aid agencies, development programs, and

DRAFT

conservation organizations to develop new strategies to ensure their work does no harm (Anderson, 1999).

One approach called the Peace and Conflict Impact Assessment (PCIA) (Bush, 1998) was developed in conjunction with the Canadian International Development Research Centre (IDRC), and has generated significant interest among many aid organizations and institutions, including CARE International, the World Bank, and the Swedish International Development Cooperation Agency. The PCIA approach assumes that any conservation or development program in a location currently experiencing conflict or with a history of conflict may have unintended negative consequences. It does not assess a project based upon its program objectives, but rather on its effects on peace and conflict. "PCIA is a means of anticipating, monitoring, and evaluating the ways in which an intervention may affect or has affected the dynamics of peace or conflict in a conflict-prone region" (Bush, 2003). This approach goes beyond simple assessment; it is intended to promote conflict-sensitivity by creating greater awareness of the interaction between the program and the context.

The PCIA approach is currently being field-tested in the transboundary Virunga Bwindi region at the border of Rwanda, Uganda, and the Democratic Republic of the Congo (Hammill and Besançon, 2006), the last habitat of the Mountain Gorilla. This region has a history of conflict and is currently experiencing conflict due to lingering instability in the region. The assessment concerns activities and projects of the International Gorilla Conservation Programme (IGCP), which utilizes a regional approach and seeks to promote cooperation at both the field and regional levels through trust and cooperation-building activities, including joint trainings, patrols, and meetings involving protected-area managers from the three countries.

So far, the PCIA field project has demonstrated some interesting preliminary results. Through the development of a cross-boundary network of communications, IGCP has provided a useful platform to deliver humanitarian aid when emergencies strike the region. For example, when Mt. Nyiragongo erupted in 2002 and lava engulfed refugee camps outside Goma, the IGCP network was able to quickly mobilize support and deliver emergency aid to refugees. In addition, there is evidence that joint ranger patrols through the forests, a project supported by IGCP, have driven out armed rebel groups that were threatening human communities at the park boundaries.

PCIA may prove to be an important tool for transboundary conservation assessment, but it first requires further field testing and conceptual development. Field tests should be carried out in different geographic locations, for different transboundary types, and in various conflict contexts, followed by a rigorous comparison of case studies to determine best practices. Furthermore, grounding the PCIA approach in the emerging field of environmental peacemaking may invigorate the dialogue about this issue and encourage the development of other innovative techniques.

Conclusion

Transboundary conservation initiatives have captured the imagination of many. They represent an ideal whereby conservation can deliver more than simply biodiversity, species, and habitat protection, but also sustainable development and the promotion of a culture of peace and cooperation. But the question remains whether this assertion is valid, whether the methods currently being employed are optimal in relation to the investment and transaction costs of such initiatives, and whether the enthusiasm for implementation overlooks the emergent and unforeseen consequences. We call for a more deliberate process of reflection and analysis that disaggregates objectives, methods, and impacts. In particular, we draw your attention to the need to standardize terminology as an aid for comparative analysis and to apply innovative

DRAFT

methods to measure impacts of different types. Without increased rigor, we have little hope of improving practice or demonstrating the effectiveness of transboundary conservation processes.

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DRAFT

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DRAFT