



Initiating effective transboundary conservation

A practitioner's guideline based on the experience from the Dinaric Arc

Edited by Boris Erg, Maja Vasiljević and Matthew McKinney



INTERNATIONAL UNION FOR CONSERVATION OF NATURE



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Foreword

The Dinaric Arc of the Western Balkans is one of the most exciting regions in Europe with a great potential for exercising regional and transboundary cooperation. Ever since the launch of the Dinaric Arc Initiative in 2004, numerous cooperation and development programmes, initiatives and site-specific projects have been implemented, many of which have been aimed at creating regional cooperation platforms and strengthening transboundary cooperation. The Finnish Development Cooperation in the Western Balkans stands out as a prominent programme in the region, with the Environment for People in the Dinaric Arc project successfully catalysing the necessary political support and action on the ground.

The Ministry for Foreign Affairs of Finland (MFA) is part of this process, which is based on the sustainable use of natural resources and takes into account the carrying capacity of nature, while also securing the provision of ecosystem services. The implementation of the Environment for People in the Dinaric Arc project is not only biodiversity conservation. It also helps combat the impacts of climate change and applies an ecosystem-based approach in the adaptation to climate change.

The Dinaric Arc represents an important region in terms of its biodiversity values, hosting large tracts of unspoiled nature and wilderness. It is also characterized by numerous transboundary sites due to the large number of countries and administrative borders. But nature knows no borders, and therefore all these sites require effective cross-border cooperation. So is the objective of this publication. Building on the experience from the Dinaric Arc, it provides a new methodological tool for all those interested in initiating transboundary conservation around the world. It is also important that this project, in a post-conflict situation, supports rehabilitation and reintegration. Collaboration over borders is trust-building.

Nature conservation professionals across borders have the same objectives, and common understanding is easily gained. What is important in transboundary conservation is to secure a high level of participation of local communities and integration in cross-border management processes for the benefit of nature and all those who share the resources. The project managed to advance the regional cooperation agenda on nature conservation, while addressing priority issues in priority transboundary sites in the region. Apart from assessing feasibility for establishing transboundary protected areas, the project has successfully managed to mobilize local actors in defining joint priorities and actions in nature conservation, thus fostering the local cooperation agenda. This only proves that successful transboundary cooperation depends as much on broad political support as on the enthusiasm of the people working on the ground.

Ms. Päivi Laivola de Rosière
Director
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Preface

Where conservation and borders coincide

Although transboundary conservation is sometimes regarded as a new and innovative approach to conservation management, it has been applied over many decades in many different parts of the world. Official recognition of these approaches includes the conclusion of specific agreements, e.g. the Waterton-Glacier International Peace Park between Canada and the USA founded in 1932. Perhaps more importantly, communities in adjacent states have been cooperating on natural resource management in many regions, in some cases long before the sovereign borders were established, or more recently, when new borders suddenly appear, such as in Southern Sudan. They have done so on the basis of need, whether it has been to resolve issues regarding the management of shared seas, mountain ranges or river basins, or to foster regional peace and cooperation. One principal issue of concern is how to go about putting transboundary conservation practice in place, though a more compelling issue is to determine why to do so.

This is where this volume comes into its own. It reflects on and reinforces the lessons and experience of undertaking transboundary conservation programmes, and so usefully sets out some existing and some new guidance for those involved. More importantly in my view, it proposes a diagnostic approach to determining what the underlying purpose is for the transboundary initiative, and to guide the practitioner to respond to this purpose and need when the programme is designed and implemented. This advice is presented in the form of a very useful self-assessment tool developed from a suite of underlying case studies from pilot sites in the Dinaric Arc. Going beyond an understanding of the rationale for the initiative, it enables those involved to consider the implications of “going transboundary”, especially as different reasons will mean the involvement of very different groups of stakeholders on either side of the border. In some cases, cooperative conservation management requires managers to talk to one another and to work out ways to share information and tackle common problems. In other cases the stakes are high, and fluid and uncertain border situations involving communities, refugees, disputed resources, or uneven costs and benefits require the engagement of actors across many institutions and sectoral concerns.

While the body of literature available on transboundary conservation tends to speak of the “promise” and benefits of these initiatives, this volume starts to draw from current practice, and provides the reader with some real life experience. Most importantly it provides an opportunity for the voices of practitioners to be heard and made available through South-Eastern Europe and to every corner of the globe where conservation and borders coincide. It adds significantly to the body of work that IUCN World Commission on Protected Areas has fostered over the past decades and promises to stimulate new thinking and, most importantly, the development of a community of practitioners who interact, learn and determine the standards of good practice.

Mr. Trevor Sandwith
Director
IUCN Global Protected Areas Programme

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Abbreviations and acronyms

BiH	Bosnia and Herzegovina	PoWPA	Programme of Work on Protected Areas
CHF	Swiss Franc		
CIC	International Council for Game and Wildlife Conservation	PPF	Peace Parks Foundation
		REC	Regional Environmental Center for Central and Eastern Europe
CBD	Convention on Biological Diversity		
CNPPA	Commission on National Parks and Protected Areas	RIS	Information Sheet on Ramsar Wetlands
COP	Conference of the Parties	SNV	Netherlands Development Organisation
CSO	Civil Society Organisation		
DAI	Dinaric Arc Initiative	TB	Transboundary
DMZ	Demilitarized Zone	TBC	Transboundary Conservation
DPRK	Democratic People's Republic of Korea	TBC SG	Transboundary Conservation Specialist Group
ECNC	European Centre for Nature Conservation	TBPA	Transboundary Protected Area
EU	European Union	UK	United Kingdom
EU CARDS	European Union Community Assistance for Reconstruction, Development and Stabilisation	UN	United Nations
		UNESCO	United Nations Educational, Scientific and Cultural Organization
EU IPA CBC	European Union's Instrument for Pre-accession Assistance Cross-Border Cooperation	UNESCO-BRESCE	United Nations Educational, Scientific and Cultural Organization-Regional Bureau for Science and Culture in Europe
FAO	Food and Agriculture Organization of the United Nations		
		UNDP	United Nations Development Programme
FBiH	Federation of Bosnia and Herzegovina	UNEP	United Nations Environment Programme
GEF	Global Environment Facility		
GIS	Geographic Information System	UNEP-WCMC	United Nations Environment Programme-World Conservation Monitoring Centre
IAPA	Internationally Adjoining Protected Area		
IBA	Important Bird Area	USA	United States of America
ISO	International Organization for Standardization	WCPA	World Commission on Protected Areas
ITTO	International Tropical Timber Organization	WDPA	World Database on Protected Areas
IUCN	International Union for Conservation of Nature	WWF	World Wide Fund for Nature
		Y2Y	Yellowstone to Yukon Conservation Initiative
IUCN SEE	International Union for Conservation of Nature Programme Office for South-Eastern Europe		
MedWet	Mediterranean Wetlands Initiative		
MFA	Ministry for Foreign Affairs of Finland		
MoU	Memorandum of Understanding		
NGO	Non-Governmental Organisation		
NP	National Park		
PA	Protected Area		
PBA	Prime Butterfly Area		
PI	Public Institution		
PLOD	Centre for Promotion of Local Development		



Introduction 1

Partners

This publication stems from a broad partnership of conservation and development organisations:

IUCN

IUCN, the International Union for Conservation of Nature, helps the world find pragmatic solutions to our most pressing environmental and development challenges. IUCN works on biodiversity, climate change, energy, human livelihoods and greening the world economy by supporting scientific research, managing field projects all over the world, and bringing governments, NGOs, the UN and companies together to develop policy, laws and best practice. IUCN is the world's oldest and largest global environmental organization, with more than 1,200 government and NGO members and almost 11,000 volunteer experts in some 160 countries. IUCN's work is supported by over 1,000 staff in 45 offices and hundreds of partners in public, NGO and private sectors around the world. www.iucn.org

IUCN World Commission on Protected Areas (WCPA)

The World Commission on Protected Areas (WCPA) is the world's leading network of protected area managers and specialists, with over 1,300 members in 140 countries. WCPA is one of the six voluntary Commissions of IUCN and is administered by the Global Protected Areas Programme at IUCN's headquarters in Gland, Switzerland. WCPA's mission is to promote the establishment and effective management of a worldwide representative network of terrestrial and marine protected areas, as an integral contribution to the IUCN mission. www.iucn.org/wcpa

IUCN WCPA Transboundary Conservation Specialist Group

The IUCN WCPA Transboundary Conservation Specialist Group is the premier global network of transboundary conservation specialists. Transboundary Conservation Specialist Group's mission is to promote and encourage transboundary conservation for the conservation of nature with associated ecosystem services and cultural values while promoting peace and co-operation among nations through enhancing knowledge and capacity for effective planning and management of transboundary conservation areas, in fulfilment of the Durban Action Plan and CBD Programme of Work on Protected Areas. www.tbpa.net

WWF

WWF, the global conservation organization, is one of the world's largest and most respected independent environmental conservation organizations. WWF has a global network active in over 100 countries with some 5 million supporters. WWF's mission is to stop the degradation of the earth's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption. WWF is known only by its initials. www.panda.org

SNV Netherlands Development Organisation

SNV is an international development organisation with almost half a century of world-wide experience. Working in over 30 countries across four continents, SNV combines the inspiration of the development worker with professional management and advisory services, strengthening the capacity of local organisations in order to create a real and lasting impact in economic development. SNV's vision is a society where all people enjoy the freedom to pursue their own sustainable development. SNV offers high quality professional services and knowledge to groups and individuals in order to build strong, stable and successful organisations that create the conditions in which people and communities are able to flourish. SNV is headquartered in The Hague, Netherlands, and registered as an independent foundation. www.snvworld.org

Environment for People in the Dinaric Arc

The project “Environment for People in the Dinaric Arc” arose from a broad collaboration between WWF, IUCN, UNESCO-BRESCE, UNDP, UNEP, FAO, EuroNatur, SNV, REC, ECNC, and CIC, called the Dinaric Arc Initiative (DAI). For many years, these organisations have worked actively in the Dinaric Arc region to secure the preservation of its wealth and integrity through the promotion and conservation of natural and cultural diversity and by empowering local societies in their efforts towards sustainable development. Following the success of the Dinaric Arc Initiative, the “Big Win” statement was released at the 9th Conference of the Parties to the Convention on Biological Diversity in 2008 (CBD COP 9), moving the governments of South-Eastern Europe closer to an emerging vision of a vast transboundary network of protected areas stretching across this ecologically important region. This joint commitment has helped to protect the region’s rich biological and cultural diversity, supporting the growth of national economies and providing a concrete basis for lasting regional cooperation.

Drawing upon these recent positive developments, IUCN, WWF and SNV have joined forces in setting up the project “Environment for People in the Dinaric Arc”. This multi-faceted project, implemented between 2009 and 2012, was aimed at supporting cross-border cooperation in the Dinaric Arc in different ways. Covering six key transboundary pilot sites, the project served to promote the natural and cultural values of the area while enhancing local livelihoods through improved regional cooperation and strengthened environmental governance. The overall objective of the project was to foster the sustainable development of rural communities and conservation of cultural landscapes in the Dinaric Arc region, with the purpose of increasing regional transboundary cooperation in the management and conservation of cultural landscapes and biodiversity. The project partners have agreed to:

- create an effective platform for supporting transboundary collaboration initiatives in Dinaric Arc countries;
- improve transboundary governance for ecologically sound development and use of natural resources; and
- demonstrate sustainable development options for rural communities in the transboundary areas by implementing action plans.

In order to meet these objectives, a broad range of activities has been undertaken over the course of three years, including:

- the development of feasibility studies to assess the potential for establishing transboundary protected areas in the project pilot sites;
- signing of transboundary Memoranda of Understanding (MoU) and the subsequent development of joint Action Plans which paved the road for a coordinated conservation action across borders;
- identification of actions in the fields of tourism, forestry, agriculture, and protection of valuable areas in support of rural development and local livelihoods;
- an increase of capacities of stakeholders at various levels, including state and local authorities, conservation experts, protected area managers and civil society organisations (CSOs);
- integration of activities into broader European and global policy and framework for nature conservation; and
- creation of platforms for key decision makers from different countries to interact and coordinate actions.

Furthermore, numerous partnerships with key regional conservation processes and projects have been established and maintained, leading to synergies and the elaboration of new innovative conservation ideas. Transboundary conservation is a long-term process with the engagement of many stakeholders, and this project is just one important step along that path. Just as the “Environment for People in the Dinaric Arc” project ensued from previous endeavours on building regional cooperation platforms, it is important to take its results further in a continuous effort to improve the state of biodiversity and local communities in the Dinaric Arc.



Background
to transboundary
conservation 2

2.1 Transboundary conservation: An emerging concept in environmental governance

Maja Vasiljević¹

Introduction

In its simplest explanation, transboundary conservation (TBC) implies working across boundaries to achieve conservation objectives. Nowadays, when globalization processes have touched upon every corner of the world, various forms of international cooperation, such as the exchange of ideas, trade, technology, have not surpassed nature and more specifically, protected areas. But in reality, how simple and straightforward can international cooperation in nature conservation be if the areas straddling the political boundaries are governed by different regimes, managed with differing objectives and engaging diverse legal and governance systems, and are possibly inhabited by communities that do not share a common language or that even have a conflicting history? Indeed, no country employs identical systems in nature conservation, and the differences can create significant obstacles that might hinder cooperation, resulting in a lack of progress in achieving the conservation objectives. Many elements are crucial in fostering transboundary conservation and its success will depend on a variety of issues that are often unpredictable and can take a long time to be resolved. On the other hand, progress and good cooperation can lead to many benefits for biodiversity, people (including cultural connectivity and economical uplift), and the politics of the specific area. As in many other fields in life, effective governance systems and competent individuals with vision, strong leadership skills and an enthusiastic attitude will lead to faster and more sustainable success of the transboundary conservation initiative.

Transboundary conservation and governance

The landmark Vth IUCN World Parks Congress (2003, Durban, South Africa) had a major global impact in terms of promoting the socioeconomic objectives of protected areas, alongside biodiversity (Phillips, 2003). New paradigms of protected areas, focusing largely on people-related issues such as local communities, indigenous peoples, development and the establishment of partnerships, alongside management and governance issues, were prominent and widely promoted during the congress. Transboundary conservation with its interrelated and manifold objectives, through the main theme of the congress, *Benefits beyond Boundaries*, received much attention, leading to the inclusion of transboundary considerations in the Durban Accord, Durban Action Plan and Message to the Convention on Biological Diversity (CBD), i.e., “We see protected areas as providers of benefits beyond boundaries—beyond their boundaries on a map, beyond the boundaries of nation states, across societies, genders and generations.” (IUCN, 2003).

The Durban Congress, and the Programme of Work on Protected Areas (PoWPA) adopted in 2004 in Kuala Lumpur, Malaysia at the 7th Conference of the Parties (COP) to the CBD, placed much emphasis on the issue of governance of protected areas. The Strategic Plan for Biodiversity 2011–2020 and Aichi Targets, both agreed upon at COP 10 in Nagoya, Japan (2010), reaffirmed the importance of diversified and effective governance systems. As Borrini-Feyerabend (2008) notes, governance, which essentially determines how power, relationships and accountability are exercised, took a prominent place in Durban and within PoWPA because protected areas have undertaken more complex and ambitious tasks than in earlier periods. It is vital not only to ensuring effective, but also long-term management of protected areas. With the evolution and modification of the role of protected areas, governance systems also changed and were upgraded, becoming varied in the types of models applied. IUCN proposes four key types of governance models: governance by government; shared (or co-managed) governance; private governance and community conserved protected areas (Dudley, 2008). Each of these models involves careful balancing between the needs of biodiversity and human livelihoods.

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Governance of transboundary conservation areas² involves highly complex arrangements as these areas normally include and affect a wide variety of stakeholders, ranging from government agencies, non-governmental organisations (NGOs), local communities and indigenous peoples, to the private sector. In order to effectively organise interactions among the involved parties and processes and provide unhindered decision-making, aimed at ensuring success of a transboundary initiative, governance of transboundary conservation areas has to include some form of shared responsibility. Shared governance, often referred to as co-management, is “a partnership in which government agencies, local communities and resource users, non-governmental organizations and other stakeholders negotiate, as appropriate to each context, the authority and responsibility for the management of a specific area or set of resources” (IUCN, 1997). It is one of the key characteristics and prerequisites for an area to be called a transboundary conservation area, whether practiced at the lowest, communication level, or at the highest–full cooperation–level (Zbicz, 1999). Co-management (or cooperative management) also implies consultation, collaboration, and coordination of planning levels which are graded between the lowest and the highest levels (Zbicz, 1999).

Establishing and coordinating cooperation at any of these levels, whether led by the involved parties themselves or facilitated by a neutral party, can be a long and costly process characterised by many challenges and obstacles. Moreover, reaching the highest level of co-management, characterised by joint management and including common integrated planning and joint decision-making, is not an easy goal to accomplish due to the complex politics and policies ensuing from the transboundary nature of the particular area. Transboundary conservation, with such a governance model, can even be perceived as a process that superimposes a new set of rules, institutions, and additional layers of politics (Wolmer, 2003). The involved parties must be cautious about the practical reasons and appropriateness of establishing new structures and potential over-politicisation of the process, keeping in mind the initial objectives of the transboundary cooperation initiative.

Co-management implies the sharing of responsibilities, the extent of which depends on the level of the co-management arrangement. For any kind of partnership to be established, there has to be mutual interest between the parties, and mutual benefits and the roles of each involved partner must be clearly articulated (Davey, 1998). There is no doubt that effective cooperation between partners with realistic common objectives about where the cooperation is leading represents an important prerequisite for the effectiveness and long-term sustainability of the overall initiative. Working across national borders poses an additional layer of complexity in terms of establishing co-management arrangements. As such, informal transboundary agreements can often be more effective and much easier to achieve.

Transboundary conservation objectives can be implemented at different levels (van der Linde et al., 2001) and are manifold, including biodiversity conservation, cultural exchange, local economic development, international cooperation, maintenance of peace and security, regional economic integration, promotion of sustainable development, etc. (Sandwith et al., 2006). By involving a variety of levels, sectors and stakeholders, transboundary initiatives are well positioned to make a considerable contribution to each individual objective. Moreover, by perceiving these objectives in a holistic way in which the conservation objectives are not singled out but interrelated, TBC initiatives may substantially contribute to the accomplishment of a number of these conservation objectives simultaneously and in an integrative way. As Sandwith et al. (2006) note, transboundary co-management with the purpose of accomplishing biodiversity conservation goals also has the opportunity to promote international cooperation, peace and sustainable development.

2 For the purpose of this publication, transboundary conservation area is understood as a wide framework of transboundary conservation practice, including different models and types such as transboundary protected areas, parks for peace, etc.

Table 1. Levels of cooperation between internationally adjoining protected areas

Levels of cooperation	Characteristics
Level 0 No cooperation	<ul style="list-style-type: none"> • Staff from two protected areas (PA) never communicate or meet • There is no sharing of information or cooperation on any specific issues
Level 1 Communication	<ul style="list-style-type: none"> • There is some two-way communication between the PAs • Meetings/communication takes place at least once a year • Information is sometimes shared • Notification of actions which may affect the other PA will sometimes take place
Level 2 Consultation	<ul style="list-style-type: none"> • Communication is more frequent (at least three times a year) • Cooperation occurs on at least two different activities • The two sides usually share information • Notification of actions affecting the adjoining PA usually occurs
Level 3 Collaboration	<ul style="list-style-type: none"> • Communication is frequent (at least every two months) • Meetings occur at least three times a year • The two PAs actively cooperate on at least four activities, sometimes coordinating their planning and consulting with the other PA before taking action
Level 4 Coordination of planning	<ul style="list-style-type: none"> • The two PAs communicate often and coordinate actions in some areas, especially planning • The two PAs work together on at least five activities, holding regular meetings and notifying each other in case of emergency • PAs usually coordinate their planning, often treating the whole area as a single ecological unit
Level 5 Full cooperation	<ul style="list-style-type: none"> • Planning for the two PAs is fully integrated, and, if appropriate, ecosystem-based, with implied joint decision making and common goals • Joint planning occurs, and, if the two share an ecosystem, this planning usually treats the two PAs as a whole • Joint management sometimes occurs, with cooperation on at least six activities • A joint committee exists for advising on transboundary cooperation

Source: Sandwith et al. (2001). Adapted from Zbicz (1999).

Achieving the TBC goals requires certain actions to be undertaken by involved parties. Common values and vision have to be identified, community needs incorporated at the start of the transboundary initiative, support of decision-makers obtained, etc. (Sandwith, 2001; Hamilton, 1996).

The growing number of TBC initiatives worldwide, involving a variety of objectives and means of implementation, has increased the need to frame the meaning of transboundary initiatives and define them.

Defining transboundary conservation: historical aspects

The terms 'transboundary conservation area' and 'transboundary conservation initiative' are used above to address geographic areas and processes where cross-border cooperation takes place with the specific purpose of achieving conservation objectives. There is a wide array of terms used worldwide to denote these processes, such as 'international peace parks', 'transfrontier protected areas', 'peace parks', 'transboundary natural resource management areas', and many others, often resulting in confusion as to their meaning and the particular objectives these areas aim to accomplish.

The process of standardization of terminology only began in the late 20th century and the beginning of the 21st century when IUCN, based on the outcomes of the workshops in Bormio, Italy (1997) and Gland, Switzerland (2000), published the landmark Best Practice Guideline *Transboundary Protected Areas for Peace and Co-operation* in 2001. This publication put forth two terms, Transboundary Protected Area and Park for Peace. Building on work by the Biodiversity Support Programme³ and following the global evolution of TBC initiatives, the scope of TBC was expanded to include broader concepts of initiatives beyond adjoining protected areas, including natural resource management initiatives (Mittermeier et al., 2005). During the “International Workshop on Increasing the Effectiveness of Transboundary Conservation in Tropical Forests”, organised by IUCN and International Tropical Timber Organization (ITTO) in Thailand in 2003, the participants discussed TBC typology among other prominent issues and suggested to involve areas where “protected areas could be miles away from international borders, and yet fall within a landscape that makes sense for integrating biodiversity conservation efforts across borders” (Mittermeier et al., 2005). Further debate involving IUCN, World Commission on Protected Areas (WCPA) experts, ITTO, InWent, and other partners continued during the workshop on La Maddalena Island, Italy in 2004, funded by the Italian Directorate for Development Cooperation.

In 2006, under IUCN’s guidance, a comprehensive typology of TBC practice was suggested, including four types: Transboundary Protected Areas, Parks for Peace, Transboundary Conservation and Development Areas, and Transboundary Migratory Corridors⁴ (Sandwith et al., 2006). Each of these types proposes an organising framework for transboundary initiatives and encompasses specific objectives:

1. Transboundary Protected Area is defined as “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 co-operatively through legal or other effective means” (Sandwith et al., 2001);
2. Parks for Peace promote peace and cooperation alongside protection of biodiversity (Sandwith et al., 2001);
3. Transboundary Conservation and Development Areas are formed by a matrix that integrate protection of biodiversity, social and economic development aspects (Sandwith et al., 2006);
4. Transboundary Migratory Corridor’s objective is to sustain a biological migratory pathway (Sandwith et al., 2006).

The historical overview given above relates to the involvement of IUCN and WCPA in framing the transboundary conservation area definitions. However, it is important to note that other definitions also exist. Two will be mentioned here, as they were developed and/or acknowledged by prominent organisations working in this field of conservation. EUROPARC Federation is one of the leading organisations promoting TBC in Europe. In 2003, it established a system of verification and certification of Transboundary Protected Areas, named ‘Transboundary Parks-Following Nature’s Design’, leading to 17 certified transboundary areas in 2012. The EUROPARC Federation recognises the definition of a Transboundary Protected Area offered by the Protocol to the Carpathian Convention, which states that a Transboundary Protected Area “is an area composed of two or more protected areas located within the territories of two or more Parties, adjacent to the state border, each remaining under jurisdiction of respective Party”.⁵

The Peace Parks Foundation (PPF) of South Africa accepted the definition promoted by the Southern African Development Community Protocol on Wildlife Conservation and Law Enforcement. According

3 Biodiversity Support Programme was a consortium of WWF, The Nature Conservancy and World Resources Institute.

4 Transboundary Protected Area and Park for Peace were defined earlier by IUCN (Sandwith et al., 2001). Two additional types of transboundary conservation practice were added in 2005 after years of consultative processes.

5 See: Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity to the Framework Convention on the Protection and Sustainable Development of the Carpathians adopted in Kiev on 22 May 2003, <http://www.carpathianconvention.org>. More information can also be found at <http://www.europarc.org>

to PPF, a Transfrontier Conservation Area (interchangeably referred to as a Peace Park) is part of a large ecological region that straddles the national borders of states, including protected areas and multiple resource use areas.⁶

Neither of these frameworks, promoted by the PPF and the EUROPARC Federation, encompasses cooperative management as an important indication of whether an area can be addressed as a transboundary protected/conservation area. Although the Basic Standards Criteria of the EUROPARC certification system define a range of measurable activities based on which the evaluation of Transboundary Protected Areas is implemented, the basic definition, as mentioned, excludes co-management. In contrast to these two definitions, one of the main characteristics of IUCN's transboundary conservation types is co-management between relevant parties. Moreover, the success of cross-border initiatives will largely depend on effective cooperation between key stakeholders.

Although a major step forward has been taken in framing TBC initiatives and helping states, protected area authorities, international organisations, NGOs and other agencies in providing advice for the implementation of transboundary initiatives, the Transboundary Conservation Specialist Group of IUCN WCPA believes there is room for improvement and adjustment. Further explanation on the need for adjusting the IUCN promoted definitions is given below.

The need for new definitions of transboundary conservation area types

In 2008, IUCN put forth a revised definition of a protected area, according to which a protected area is “a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values” (Dudley, 2008). Currently, IUCN WCPA-promoted definitions of TBC types do not conform to the protected area definition, and thus require alignment.

Apart from this important element, two additional issues need careful discussion and consultation among TBC practitioners and interested parties. Firstly, this relates to the issue of inclusion of borders of sub-national units in transboundary areas, and secondly, the issue of geographical range of protected areas in relation to the state border. Transboundary conservation area types have so far included the borders of sub-national units (provinces and regions) and autonomous areas within a single national state. This was deliberately done in respect of all the efforts and obstacles proponents of TBC initiatives have to surpass to ‘designate’ a transboundary conservation area, whether working across state borders or other administrative types of borders. However, sub-national units can extend to very micro-level landscapes, and thus create uncertainty about whether a particular area can be regarded as a transboundary conservation area or not. This understanding of a transboundary area needs revisiting and likely amendment to provide better clarity and simplicity in the already highly complex work related to TBC initiatives.

IUCN WCPA Transboundary Conservation Specialist Group members further believe that the geographical range/area encompassed by transboundary conservation area needs to be discussed. Initial consultation among the Specialist Group revealed this issue to be quite complex. A transboundary protected area, according to most, is perceived as one that straddles state boundaries, i.e. protected areas in adjoining countries. However, if protected areas in two or more countries are distant from one another, but have an excellent working relationship, should we neglect the fact that cooperation for common conservation goals in this particular region/area/ecosystem occurs? What geographical range is acceptable, i.e. how far can protected areas be, to be regarded as a transboundary conservation area?

The Transboundary Conservation Specialist Group is currently working towards proposing new definitions to further strengthen the terminology. In this consultation process, broader nature conservation expert networks and interested individuals will have the opportunity to comment on newly drafted suggestions for transboundary conservation area types.

⁶ For more information, visit: <http://www.peaceparks.org/>

Conclusions

“When protected areas are found on both sides of an international boundary, cooperation replaces the potential for conflict, tourism becomes a force for peace, and problems are converted into opportunities”, said Valli Moosa, former IUCN President (taken from Hanks 2007/2008). This citation shows an opportunistic and encouraging possibility of TBC initiatives, highlighting some of the potential benefits and objectives of such an approach. Transboundary conservation initiatives can indeed include protected areas with specific goals to contribute to the conservation of nature with associated ecosystem services and cultural values, while they can also comprise other areas that add to social, economic and other objectives. The value of TBC initiatives is not only in achieving a clear set of conservation and other complementary objectives, but also in initiating a process with the aim of agreeing on these goals and implementing the necessary activities and actions in a cooperative way. Transboundary co-management, in which diverse stakeholders across boundaries of sovereign states negotiate common objectives and management of a particular area, is a complex model of governance that implies long-term engagement of all involved parties. Implementing a successful and sustainable TBC initiative is thus a commendable mission.

2.2

Transboundary conservation areas: History and global trends

Maja Vasiljević

The first transboundary conservation initiatives worldwide

The first plans for the establishment of a Transboundary Protected Area (TBPA) originated in Europe between Poland and the then Czechoslovakia. The governments of these states signed the Krakow Protocol on 6 May 1924 to officially delineate the state border between the two countries after World War I. The Krakow Protocol is an important document in relation to transboundary conservation (TBC) as it contained an Annex which called for designation of a common bilateral nature park in the most attractive areas of the Pieniny Mountains. The provisions of this Annex came into effect in July 1932 in both countries, following a ceremony in Crveny Klastor proclaiming the first TBPA in Europe.⁷

Although the idea of cooperation across national boundaries for nature conservation purposes emerged in Europe, the first TBPA was actually proclaimed in North America between Waterton Lakes National Park in Canada and Glacier National Park in the USA just one month earlier than in Europe, in 1932. The parks were officially inaugurated as the Waterton-Glacier International Peace Park, celebrating the peace and goodwill between the two countries.

In other parts of the world, TBPAs were established much later. In Central America, the first TBPAs were launched in the late 1970s, following the First Central American Meeting on Management of Natural and Cultural Resources (1974 in Costa Rica). The third Recommendation ensuing from that meeting specifically referred to border park areas and the need to establish cooperation between neighbouring countries in their management (Budowski, 1975). With the specific objectives of the management of natural resources and a peaceful relationship, the first TBPA in Central America, La Amistad, was designated between Costa Rica and Panama, following the historic meetings of the two presidents in 1979 and 1982 (Castro et al., 1995).

In South America, cooperation between Argentina and Brazil in the management of Iguazú/ Iguazu National Parks was established in the mid 1980s, while in Africa, the official launch of a TBPA between South Africa and Botswana (Kgalagadi Transfrontier Park) occurred in 2000 (Mittermeier et al., 2005). Asia was the first continent to host the establishment of a marine TBPA in 1996, when the governments of Malaysia and the Philippines declared the Turtle Islands Heritage Protected Area to secure the survival of marine turtles in the Sulu Sea.⁸

Nowadays, among other important transboundary initiatives in Europe, two important large-scale regional initiatives contribute to the overall TBC agenda; the European Green Belt and the Dinaric Arc Initiative. The first spans a large trans-national corridor running from the Barents to the Black and Adriatic Seas, and the second pertains to the Dinaric Arc eco-region in South Eastern Europe. Both initiatives have TBC at their core, supporting regional cohesion and local nature conservation and sustainable development activities. Within the European context, EUROPARC Federation's verification and certification system, 'Transboundary Parks-Following Nature's Design', has special significance for acknowledging effective transboundary practice. This certification system consists of the Basic Standards Criteria, measurable activities that define European TBPAs.

Transboundary conservation areas were, and continue to be, established with the purpose of fulfilling a variety of objectives, spanning from nature conservation as the primary objective, celebration of peace and endeavouring to establish peaceful cooperation, to regional and bilateral political stability, spurring economic growth, and social and cultural reintegration. Having in mind the current number of more than 200 transboundary initiatives worldwide (UNEP-WCMC, 2007), the previous brief review of the establishment of TBC initiatives indicates that the transboundary cooperation processes have

⁷ For more information, please visit: <http://www.pieninyprn.pl>

⁸ To see the Memorandum of Understanding between the two governments, please visit: <http://eelink.net/~asilwildlife/TIHPA-MOA.html>

been developing rapidly since the late 20th century. Transboundary approaches have obviously gained in popularity in recent decades, with relevant parties recognising the multiple benefits transboundary initiatives can bring. The recent review of the Convention on Biological Diversity's (CBD) Programme of Work on Protected Areas (PoWPA), showed that since 2004 transboundary related provisions in PoWPA achieved 'fair to good progress' (IUCN WCPA, 2010). This assessment was based largely on the increase of the number of TBPA's and the types of cooperation worldwide.

Global rise of transboundary conservation areas

Attempting to make a comprehensive global inventory of transboundary conservation areas, or specifically Transboundary Protected Areas, is a demanding, complex, and ongoing task. There have been several attempts to register and map these specific areas at the global and/or regional scales, most of which differ in some way in the methodology and data sources used, making comparative analyses difficult. Having a global list of Transboundary Protected Areas and/or other transboundary conservation area types that would include a variety of relevant data, would have many advantages and enable users to analyse the information, exchange experiences, create connections between managers, follow up a global trend, etc. Indeed, a lot of work has already been done in that regard, largely by the United Nations Environment Programme's World Conservation Monitoring Centre (UNEP-WCMC),⁹ IUCN, and Dorothy Zbicz as part of her doctoral dissertation. At the regional scale, the work of IUCN-WCPA in the 1990s in Europe contributed substantially to the global database,¹⁰ resulting with an inventory of more than 80 areas with transboundary cooperation (Brunner, 1999). Each of these databases contains valuable information which indisputably lead to wider promotion of TBC approaches at the global scale. However, there is still sufficient room for improvement of the quality and content of the TBC database, which would then offer better possibilities and opportunities for the work of scientists, practitioners and others involved in TBC initiatives.

The first global inventory of transboundary conservation areas was made in 1988 by IUCN (Jim Thorsell) and UNEP-WCMC (Jeremy Harrison). A total of 70 'transfrontier nature reserves' (or border parks, i.e. protected areas that meet at international borders), involving 65 countries, were identified and presented at the First Global Conference on Tourism—A Vital Force for Peace in Vancouver, Canada in 1988 (Thorsell and Harrison, 1990). Dorothy Zbicz (then at Duke University, USA) and Michael Green (UNEP-WCMC) updated the preliminary IUCN-WCMC list and presented the inventory of 136 'transfrontier protected area complexes' at the International Conference on Transboundary Protected Areas as a Vehicle for International Cooperation in Somerset West, South Africa in 1997 (Zbicz and Green, 1998). This list included protected areas (according to the then IUCN definition)¹¹ adjoining across international boundaries, including protected areas that nearly met across the boundaries, as explained by Zbicz (1999). The inventory also included a separate list of potential transboundary complexes in cases where protected areas were established in one country while the adjoining areas in another country were in the process of establishment or without an assigned IUCN category (Zbicz, 1999). This second list was a valuable indicator of the growth of transboundary initiatives in the following years, and provided important information for potential development, establishment and promotion of future transboundary conservation areas.

The 1997 inventory was further updated by Dorothy Zbicz in the years to come and presented as a 'global list of adjoining protected areas' or 'internationally adjoining protected areas' (IAPAs) in 2001. The criteria for the compilation of the 2001 list were equivalent to those for the assemblage of the 1997 list, focusing on shared ecosystems rather than the existence and/or levels of cooperative management. The results in 2001 showed a rising trend in terms of the increase in the number of IAPAs, which numbered 169 (Zbicz, 2001).

9 UNEP-WCMC is responsible for compilation and maintenance of the United Nations List of Protected Areas, based on official government reports.

10 The first inventory was done in 1994 and the second in 1999 under IUCN's Parks for Life-Action for Protected Areas in Europe initiative.

11 See: IUCN. (1994). *Guidelines for Protected Area Management Categories*. CNPPA with the assistance of WCMC. IUCN, Gland, Switzerland and Cambridge, UK.

In 2005, UNEP-WCMC performed a somewhat different analysis of 'IAPAs and other transboundary conservation initiatives' than in previous years, not primarily relying upon surveys of protected area managers, but upon Geographic Information System (GIS) data contained in the World Database on Protected Areas (WDPA)¹² (Mittermeier et al., 2005). The 2005 inventory contained 188 IAPAs and other TBC initiatives spanning 112 countries (Mittermeier et al., 2005).

The latest revision of the list of transboundary conservation areas was based on reviewing WDPA maps by UNEP-WCMC in 2007, and it included both TBPAs and IAPAs. The result was 227 transboundary complexes meeting the following criteria: conforming to the then IUCN definition of a protected area, included in WDPA, adjacent to an international border and to a protected area in a neighbouring country, and adjacent to IAPA complexes (UNEP-WCMC, 2007).

It is important to emphasise that neither of these assessments specifically included co-management as a criteria for listing the areas, although cooperation between relevant parties is a prerequisite for an area to be perceived as a TBPA (or any other type of TBC practice), while it is an irrelevant criteria for IAPAs. However, the survey sent to protected area managers by Zbicz (2001) contained a question on co-management, and the analysis showed that 82% of IAPA complexes had some form of cooperation (although most at the lowest level). Although the 2007 UNEP-WCMC list contains both TBPAs and IAPAs, there is no clarity as to which sites fall under which category. In future assessments it would be necessary to further consider co-management arrangements between transboundary conservation areas in order to obtain a more comprehensive view of real TBPA numbers at the global level and to distinguish TBPAs from protected areas that adjoin international boundaries and have no cooperation in place.

Conclusions

Although cooperation in conservation across international boundaries started in the early 1900s, its rapid growth began in the late 20th century and continues today. Creating an accurate inventory of global TBC initiatives depends on many aspects, primarily the methodologies used for the development of the inventory and its updating. WDPA as the key source of information is critical in that regard. Furthermore, the potential that such a database holds is enormous. In further assessments, it is critical to include a variety of information that would raise the value of the database and offer greater opportunities for various users.

As it stands, the latest database of 2007 has several shortcomings, as it does not distinguish between TBPAs and IAPAs, and does not include several protected areas in certain transboundary complexes or list those protected areas that do not comprise part of a certain TBPA. Updating the database would require much needed improvements and corrections. However, despite all of the difficulties of analysing the 2007 database, this list, in relation to the previous ones, is certainly a good indicator of where transboundary conservation areas are heading in terms of the global trend. Protected Planet, a joint UNEP and IUCN initiative that draws upon WDPA, is a recent endeavour that provides another opportunity for the collection and in-depth dissemination of information pertaining to TBPAs and IAPAs. What we can conclude is that TBC is an appealing phenomenon to many countries worldwide, that there is obvious interest in cooperation across international boundaries for the purpose of common management of nature and divided ecosystems, and in view of fulfilling a variety of social, economic and other objectives the cooperation brings.

Apart from governments, TBC initiatives are facilitated by non-governmental organisations (NGOs), both international and national, various UN agencies, protected area managers and staff, international organisations, and other stakeholders. Several organisations, such as IUCN with its Transboundary Conservation Specialist Group of the World Commission on Protected Areas, EUROPARC Federation, Peace Parks Foundation, Conservation International, The Nature Conservancy, UNESCO, UNEP, InWent, WWF and ITTO, just to name a few, have provided leadership and guidance in TBC at the

¹² WDPA development and maintenance is a joint effort of UNEP WCMC and IUCN.

global and/or regional scales. A 'Global Transboundary Conservation Network',¹³ coordinated by IUCN WCPA Transboundary Conservation Specialist Group, has aided greatly in promoting TBC and its benefits and challenges, allowing communication across diverse audiences worldwide.

¹³ Launched in 2003 in Durban at the Vth World Parks Congress as a 'Global Transboundary Protected Area Network'. Please visit <http://www.tbpa.net>

2.3

Challenges and opportunities of transboundary conservation in the Dinaric Arc

Maja Vasiljević

Introduction

“Little will happen if there is no spirit of cooperation among the partners, no practical incentives to collaborate or understanding of potential benefits, and no intention to understand and respect each partner’s different operational conditions or culture” (Niewiadomski, 2011). This statement summarises some of the most important elements characterising the development and establishment of a transboundary conservation (TBC) initiative. Nature is central to any transboundary conservation area, and apart from legal frameworks and institutional set-ups, the key to nature conservation across the boundaries of sovereign states often lies with enthusiastic, efficient and competent people who respect each other’s history and present conditions. Each transboundary initiative is started for a specific reason related to the easier and more effective management of relevant protected areas or biodiversity, whether addressing joint monitoring of a certain species, sharing of equipment, or any other similar reason, while potentially bringing benefits for socio-economic conditions in the area and creating a cooperative environment. The specificity of such initiatives is cooperation across boundaries. The goals will be easier to achieve if the benefits and the needs of each party are articulated at the beginning of the whole process. This implies a well-defined and broad consultation process and public participation, so that all parties involved know exactly what the process will bring for them and their position in this process. Benefits, some of which relate to economic incentives and financial sustainability, are one of the key drivers of today’s world. The value that the TBC approach will bring for nature, local communities, politics, and potential regional stability needs to be clearly expressed. If we focus on the local managerial level of a certain transboundary conservation area, it is clear that the day-to-day benefit of cooperation, in addition to good governance structures, has to be visible and understandable to all stakeholders involved.

Challenges of going transboundary

Hamilton et al. (1996) identified several of the most common difficulties in establishing transboundary conservation areas, such as: diverse degree of professionalism, different stages of economic development, language barriers, political, cultural and religious differences, etc. Conflicting laws and policies with respect to wildlife trade and harvesting, enforcement of poaching prohibition, immigration and customs and other critical issues may all reduce the effectiveness of a transboundary initiative (Hamilton et al., 1996; Tamburelli, 2007). In some countries, the national legislation does not recognize transboundary conservation area establishment, making any kind of joint management or management planning difficult in practice.

Transboundary conservation processes can be initiated at various levels, ranging from high political to local levels. International organizations are often seen as drivers of transboundary processes. Often, political indifference and unresponsiveness can hinder the official establishment of a transboundary conservation area, which might have implications for on-the-ground cooperation between protected areas across state boundaries. Informal arrangements of cooperation between managers of protected areas can, in many cases, be an efficient operating framework (Hammill and Besançon, 2007). Ecological goals need to be aligned with the expectations of the local communities, thus inappropriate information sharing and insufficient communication between the leaders of transboundary initiative and relevant stakeholders might result in an unsupportive response.

Once all the necessary conditions for the initiation of a TBC process are met, it can be kicked-off by setting tangible joint goals and determining areas of cooperation. Operating structures have to be established and agreed upon, plausibly keeping in mind the financial sustainability of the entire process.

There could be various challenges to resolve in setting up a functional transboundary conservation area, with many issues being site- and/or region-specific. This is why opportunities resulting from such initiatives, including the goodwill to cooperate for mutual benefits, need to be clearly articulated.

Opportunities generated by transboundary conservation approaches

Although the objectives of TBC can range from the accomplishment of social, economic, and political targets, transboundary conservation areas are primarily underpinned by ecological reasoning, whether focusing on the conservation of shared natural heritage or sustaining species migrations. Essentially, it is about improving the management, understanding and sustainability of a shared ecosystem across international boundaries, which implies active cooperation and, potentially, joint decision-making and management. Hamilton et al. (1996) note that transboundary conservation areas have the ability to reduce the risk of biodiversity loss through common and coordinated cross-border measures. In this time of global concern for impacts of climate change, Hamilton (2008) emphasises the importance of large protected areas such as transboundary areas that conserve carbon rich habitats, thus increasing the resilience to adjust to climate change. Eventually, habitats resilient to climate change help communities increase their resilience. A range of practical management benefits result from cooperative approaches across boundaries, i.e. management of invasive species, disease control, illegal trade of species, poaching and wildfire management. These and potentially other opportunities, such as the sharing of heavy and costly equipment or organizing joint patrols, reinforce communication and enable enhanced social relations and the building of trust among partners.

Transboundary conservation areas that integrate nature conservation and sustainable development can strengthen bilateral or regional political security while simultaneously providing benefits to the local population (Sandwith et al., 2001). Indeed, transboundary conservation areas can ease border crossing by, for example, removing barriers for free movement of wildlife, improving access of tourists to the whole area, and facilitating the interaction between communities (Braack et al. 2006). However, this may be interpreted as a threat to national sovereignty. Tourists can possibly visit a larger territory presented commonly as one area which can create a positive feeling and perception of the area by visitors. The organisation of events that involve local communities is not to be underestimated as these informal gatherings represent a venue for people to learn about each other's culture, history, language, build friendships, and raise enthusiasm for further connections and cooperation. By creating biological connectivity through cooperation, transboundary initiatives also help maintain or restore traditional land use practices. From an economic standpoint, transboundary conservation areas, located at border areas which are often regarded as disadvantaged zones in national terms, offer the potential for development through nature-based tourism, not only at state level, but also at the local community level. Livelihood development, embedded in the goals of transboundary initiatives, refers not only to income generation, but also to the recognition of local identity, tradition, and rights to land and natural resources.

In 1997, 72 participants from 32 countries adopted the Declaration of Principles at the International Conference on Transboundary Protected Areas as a Vehicle for International Cooperation in Somerset West, South Africa, "A major contribution can be made to international co-operation, regional peace and stability by the creation of transfrontier conservation areas which promote biodiversity conservation, sustainable development and management of natural and cultural resources" (IUCN/WCPA, 1997). This conference was important for acknowledging the potential contribution of TBC in fostering peace and stability in regions worldwide. Establishment of a dialogue between scientists, protected area managers, NGOs or other important stakeholders in times of political instability is seen as one step forward in encouraging regional security and peace building. The countries characterised by the Dinarides (also referred to as Dinaric Alps¹⁴) of South-Eastern Europe are an example.

14 The Dinaric Alps are the backbone of the Dinaric Arc ecoregion, as proposed by WWF. The Dinaric Arc is nowadays a common term used by conservationists denoting this particular region of South-Eastern Europe.

Importance of transboundary cooperation in the Dinaric Arc

The Dinaric Arc is a region of South-Eastern Europe encompassing a large portion of the Western Balkans between the Adriatic Sea and the Danube Plain. It forms the backbone of the region, which is endowed with natural and cultural heritage whose richness and variety are almost unparalleled in Europe and the Mediterranean Basin. Over the past twenty years, the countries of the Dinaric Arc have experienced periods of high political and social instability, conflicts, economic crisis and transition towards a market economy. These difficult times have had a serious negative impact on societies, as well as on the integrity of ecosystems and natural resources. However, recent conservation efforts have created a unique opportunity to boost positive societal changes in the region.

Stemming from the Dinaric Arc Initiative (DAI) launched in 2004, one of the major achievements of the six countries forming the Dinaric Arc (Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia, and Slovenia) in the area of international cooperation on nature conservation was the recognition of the importance of 'transboundary cooperation between the Dinaric Arc countries in the implementation of the Programme of Work on Protected Areas,¹⁵ with the aim to create a well managed, and ecologically representative protected area network', as 'the key to safeguard the Dinaric Arc ecoregion's exceptional natural and cultural values' (WWF, 2008). The Joint Statement signed by the governments during the Big Win for the Dinaric Arc high-level event at the 9th Conference of the Parties to the Convention on Biological Diversity (CBD COP 9) in Bonn, Germany in 2008 has had tremendous value in providing political support for regional mutual cooperation and the exchange of experiences in protected area management. During this event, Bosnia and Herzegovina announced the proclamation of a new national park, Una, which has become one of the protected areas that is practicing transboundary cooperation with the neighbouring Plitvice Lakes National Park in Croatia. Further regional conservation efforts are encapsulated in the Resolution on the Sustainable Development of the Dinaric Arc Region and the recent initiative to designate a serial UNESCO World Heritage site that would be called 'Dinaric Karst'.

Transboundary conservation in the Dinaric Arc region¹⁶ is a necessity prompted by ecological, cultural and social reasons. Characterised by many national borders that cut across ecosystems and areas of high natural values, with large forests and high floral species diversity, a high rate of endemism, populations of large carnivores, freshwater ecosystems, and the largest karst ecosystem in Europe, international cooperation is imperative in order to conserve and sustain the region's natural heritage. With the break-up of the former Yugoslavia, regional large-scale conservation planning and the development of a protected area network was fractured. Furthermore, many environmental threats reside beyond the borders of the respective countries and cannot be mitigated without cooperation and joint planning and action.

The socioeconomic situation in the Dinaric Arc countries reflects the need to improve the standards of living for the population, creating challenges in balancing between development pressures (resulting with for example, uncontrolled development and illegal construction in protected areas, excessive extraction of natural resources, ever-growing tourism pressures, poaching and illegal wildlife trade, extensive logging in protected areas, etc.) and nature conservation. The development pressures require strengthened implementation of existing legislation and policies in the majority of the Dinaric Arc countries. Transboundary conservation could potentially bring economic benefits to the involved countries and local populations, especially through carefully planned tourism development in the border areas and by curbing uncontrolled development projects.

The region is not only wealthy in terms of natural, but also in cultural heritage, and strengthening communication and links between societies would be a positive element of rebuilding trust and hope in this previously war-torn region. It is important to stress that not all countries in the region have shared

¹⁵ Adopted during the CBD COP 7 in Kuala Lumpur, Malaysia, and among other targets and goals related to protected areas, encouraging the States Parties to the CBD to cooperate in establishing transboundary protected areas (Convention on Biological Diversity, 2004).

¹⁶ Note that Kosovo (the territory under the United Nations Interim Administration Mission in Kosovo, established in 1999 by UN Security Council Resolution 1244) also forms part of the Dinaric Arc region.

the same political and development path in the last 20 years. Slovenia is a full member of the European Union (EU), while Croatia is about to join the EU as a full member in 2013. The remaining countries are in various stages of the EU accession process. The current situation shows the varying progress of countries in terms of alignment of the national legislation and adoption of EU policies and frameworks regarding nature conservation.

Dinaric Arc: Transboundary conservation challenges and opportunities

Considering the specificities of the Dinaric Arc region regarding the region's political, social, economic, ecological and geographical background and current state, the necessity and the potential for TBC approaches in the Dinaric Arc are by all means required and desirable. This is also prompted by the fact that the local capacity for implementing environmental and conservation policy is limited. The main geomorphological feature of the region is the Dinaric Arc karstic mountain chain, thus all the countries involved share the ecosystems that need a unified approach to conservation planning and management in order to conserve biological diversity. Moreover, as the overall coverage of protected areas in the region is insufficient for long-term protection of populations of large mammals and the most valuable natural areas, cooperation is needed to set up large-scale protected areas and enable coordinated ecosystem-based management. Furthermore, biodiversity protection is particularly inadequate in the corridors between protected areas across the region (Glasnović et al., 2009). Mutual scientific and institutional cooperation in the existing protected areas and their management certainly is and should be led by conservation interests, e.g. cooperation in safeguarding shared ecosystems, research of wildlife and migratory species, setting up a common species database, joint monitoring, and the like.

Clearly not all the countries of the Dinaric Arc region are at the same level of socioeconomic development, nor do they share equal levels of technical expertise and knowledge. Transboundary conservation practice would enhance the transfer of expertise and know-how, and thus raise the necessary institutional and personnel capacity of key players in the region. Yet, several state-of-the-art research centres are based in the region and actively contribute to research, science and conservation practice. Considering the region's geomorphology, cooperation with and building on the expertise of karst research institutes in the region is of prominent value. It is important to mention that in the Dinaric Arc, characterised also by marine habitats of the Adriatic Sea and islands, there is a particular opportunity to strengthen regional marine conservation and establish transboundary marine protected areas. More extensive use of advanced technologies in underwater research is certainly one way of facilitating this process.

Apart from differences in capacity and levels of technical expertise, the countries of the region do not have comparable financial resources in nature conservation budgets, thus it is often difficult to expect a similar commitment of resources and staff time to a particular transboundary conservation-related 'idea'. Joint fundraising and coordinated implementation of actions through a commonly established trust fund and for the benefit of the whole transboundary conservation area might be a solution to this issue. As mentioned earlier, the challenges of balancing between development and conservation are high in this particular region. A particular contribution of transboundary cooperation is seen in increasing the opportunities for the sustainable development of local communities, in which the uplift of local livelihoods is integrated within the overall plan of the transboundary conservation area. Communication and general working relationships between protected area staff, local authorities, local communities and NGOs need to be supported.

Considering the multiple impacts of the relatively recent conflict in the 1990s that affected several countries of the Dinaric Arc, and continued ethnic tensions in some of the region's parts, the notion of transboundary conservation areas for promotion of peace and security is an important element in this particular region. Continued building of trust, including rebuilding of confidence at local levels with political support has the power to position transboundary cooperation for nature conservation purposes at the top of agenda in furthering regional security.

The Dinaric Arc region is a rich conglomerate in terms of cultural heritage, considering its geographical position as a crossroads between Western Europe and the Middle East. From a cultural heritage viewpoint, the differences could actually accentuate the attractiveness of the region for cultural tourism. Even locally, interaction between communities and protected area staff across boundaries of states could have a positive effect in terms of reaching mutual understanding and appreciation for one another's heritage.

“Successful transboundary cooperation requires not only understanding of the ‘transboundary added value’, legal agreements, administrative framework, financial support and allocating people and resources but also a ‘new mental attitude’ by thinking of the area as ‘one coherent natural transboundary eco-region’” (Niewiadomski, 2006). Keeping in mind all the obstacles due to the turbulent past of the region, perceiving the area as one natural coherent unit, while simultaneously appreciating its cultural values, might not be an easy task. However, in recent years, developments such as the Big Win for Dinaric Arc Joint Statement signed by the region's governments and the functioning of a Dinaric Arc Initiative (consisting of international institutions active in the region¹⁷) have advanced the region's unity in terms of conservation and sustainable development, providing necessary support for increased regional cooperation and strengthened environmental governance.

¹⁷ For more information see: <http://www.dinaricarc.org/dai.html>



Guidelines 3

3.1

Guidelines for initiating transboundary conservation¹⁸

Matthew McKinney¹⁹ and Maja Vasiljević

Introduction

Practical experience—supported by research into many transboundary conservation initiatives throughout the world—suggests that there is no single model for developing and implementing transboundary conservation (TBC).²⁰ In fact, the most effective approaches to TBC are home-grown, tailored to suit the issue at hand, and adapted to the unique needs and interests of each region. Cooperation itself often implies complex relationships between relevant parties in which influence and power need to be carefully negotiated, conflicts resolved and objectives jointly determined. Working jointly for a common cause reflects the true spirit of the cooperative process. Furthermore, transboundary cooperation is not only about cooperation for the generation of public value and ecological benefits, but specifically to negotiate responsibility and institutional arrangements in management of a specific area (i.e. protected areas) across state boundaries. This particular form of governance is referred to as cooperative management (IUCN, 1997). State boundaries with their characteristics add to the complexity of relationships between relevant parties and can slow the entire co-management process. Based on these premises, this chapter presents guidelines on initiating and designing TBC efforts. Presenting such a process is quite different from assessing existing policies or plans to deal with such problems, or even generating additional substantive prescriptions.

The distinction here between substance and process is not trivial. There is a huge difference between what should be done about a particular transboundary land or water issue and how people who care about such issues should determine what ought to happen. The first problem is one of substance and the relative effectiveness of alternative policies and plans. The second is one of process—how to bring together the appropriate people with the best available information and capacity to address social, economic, and environmental issues that cut across multiple jurisdictions, sectors, and disciplines.

This chapter presents guidelines on the TBC process. It presents a variety of principles, techniques, strategies and concepts to help people diagnose a transboundary issue, and to then initiate and design an appropriate process or forum to address the issue. We refer to these materials as ‘tools’ not because of their technical complexity—most of the ideas are just organized common sense—but because of their emphasis on utility and their application to TBC throughout the world. We offer these ideas and tools as a work in progress and look forward to feedback on how to improve the TBC process.

Key elements

Although there is no single model of TBC, ten key elements help explain what catalyzes, enables, constrains and sustains such efforts. These elements guide choices about how to prepare, organize and take action, and focus on the process of TBC rather than the substantive policies and plans to deal with specific transboundary issues.

All ten elements are present in every successful TBC effort, regardless of the style or approach adopted by the practitioners. In each case, however, the elements are managed in a unique way to create a home-grown set of solutions and institutional arrangements. Successful practitioners manage these

¹⁸ This chapter is adapted in part from Matthew McKinney and Shawn Johnson, *Working Across Boundaries: People, Nature, and Regions* (Lincoln Institute of Land Policy, 2009).

¹⁹ Center for Natural Resources & Environmental Policy, The University of Montana, USA, email: matt@cnrep.org

²⁰ For examples of transboundary conservation initiatives see: Mittermeier, R.A., Kormos, C.F., Mittermeier, C.G., Robles Gil, P., Sandwith, T. and Besançon, C. (2005). *Transboundary Conservation. A New Vision for Protected Areas*, CEMEX-Agrupación Sierra Madre-Conservation International, Mexico; Vasiljević, M., Pezold, T. (eds.) (2011). *Crossing Borders for Nature. European examples of transboundary conservation*. Gland, Switzerland and Belgrade, Serbia: IUCN Programme Office for South-Eastern Europe.

elements in such a way that the process and set of actions that emerge are designed and built by those who best know the particular landscape.

1. **Catalyst:** the crisis, threat, or opportunity that compels people to think and act transboundary. Most people are not accustomed to working across boundaries. They focus instead on the tasks immediately within their smaller sphere of influence. Anything beyond that is considered someone else's responsibility. Social and political arrangements further discourage people from working outside their individual silos. Given these challenges, transboundary cooperation becomes compelling when people recognize that they are more likely to achieve their interests by working together than by acting independently. Typically, this happens when people are faced with an immediate crisis or a threat to their quality of life. In some cases, people begin to cooperate proactively, before a crisis or threat appears, to take advantage of opportunities and benefits that arise from transboundary conservation.

2. **Leadership:** the need for different types of leaders to catalyze, enable, and sustain action. TBC requires a certain type of leadership or coordination. In contrast to exercising authority by taking unilateral action—a command-and-control model of leadership—regional coordinators readily cross jurisdictions, sectors, disciplines, and cultures to forge alliances with people holding diverse interests and viewpoints. They invite people to take ownership of a shared vision and values, and they work hard to bridge differences and nourish networks of relationships. To move in the desired direction, regional coordinators share power, mobilize people, synthesize ideas, and assemble resources. In the midst of this action, they provide integrity and credibility and advocate for the integrity of regional partnerships. They also show a high tolerance for complexity, uncertainty and change, and they emphasize dialogue and relationship building by respecting the diversity of ideas and viewpoints. Respect builds trust, which in turn fosters communication, understanding and, eventually, agreement. Recruit people with the above qualities wherever you may find them.

3. **Representation:** the people, organizations, and jurisdictions needed to achieve the desired outcome. Acknowledging the interdependence of interests is just a start. To launch a TBC initiative, people must also want to change their situation for the better. Of course, it helps if people agree at least in broad terms on the general direction of that change and are willing to form working relationships among diverse interests. Such a constituency for change generates traction on the issue at hand among the broader public and the decision makers. It also helps to create momentum that can carry transboundary work over any initial inertia and through early obstacles. For these reasons, it is important to assess the level of interest in the issue at hand and determine whether people are ready to begin working together toward a better future. If the objective of transboundary cooperation is to advocate for a particular interest or outcome, the process requires a different group of people than if the aim is to resolve a multiparty dispute or to advance an agenda that includes multiple interests. In these latter cases, it is best to be as inclusive as possible by engaging people interested in and affected by the issue, those needed to implement any potential recommendation (that is, those with authority), and those who might undermine the process or the outcome if not included. Think carefully about the roles and responsibilities of existing jurisdictions and agencies, and keep in mind that there may be people outside the region who need or want to be involved. Also, keep an eye out for potential collaborative coordinators.

4. **Regional fit:** the tension of matching the problem-shed with people's interest. The way in which people define a region naturally flows from their interests and concerns. Regions are most often defined in one of two ways: either rooted in a sense of place, or based on the 'territory' of the problem. Natural ecological boundaries—such as watersheds, ecosystems, and wildlife habitats—can help inform the appropriate definition of a region, but in the final analysis the region must engage the hearts and minds of people and appeal to their shared interests. Recognizing the precise physical boundaries of a region is often less important than clarifying the core area of interest. Boundaries can be soft and flexible, adaptable to changing needs and interests. In sum, the region needs to be large enough to capture the problem, and small enough to get traction among people whose interests are at stake.

5. **Governance:** the degree of decision-making authority, along with mechanisms for funding and dispute resolution. Given that TBC brings together people and groups from multiple jurisdictions,

sectors and disciplines, it is critical to be clear about how the communication will be conducted. The more diverse and complex the communication, the more it helps to articulate a common understanding of the goals, roles, and responsibilities of the participants. In short, the participants need to get organized (by clarifying operating protocols) and assemble the necessary resources (i.e., people, skills, information, and funds), preferably before they jump into dialogue on substantive issues. Sometimes all of these resources and capacities must be developed from the ground up, but the more common experience is to borrow or leverage the resources and capacities of groups already working in particular area. These resources simply need to be identified and better coordinated to be used more effectively.

6. Knowledge and experience-sharing: the process of facilitating scientific and public learning. Learning is a key part of working across boundaries. Participants confront new information and new ideas from every angle. They face mountains of scientific and technical data. People may be sceptical about information that comes from outside their jurisdiction or area of expertise. To complicate matters, existing information is often at the wrong spatial scale to be useful, or it is scattered in multiple databases, each in a different format. Under such circumstances, building understanding and agreement is difficult at best. The most effective transboundary initiatives respond to these challenges by fostering joint learning, gathering and interpreting information as a common group, and through joint fact-finding and similar processes.

7. Strategy: the formulation of a vision, goals and aspirations. People facing a transboundary conservation issue usually want to get right to work. But it is well worth taking a little time up front to articulate desired outcomes jointly and map out practical strategies to achieve those outcomes. Such an action plan is built around a shared vision for change. People negotiate among their desired outcomes until they have a package that everyone can agree on, and then they negotiate options for how to make those outcomes happen. Every cross-border enterprise is unique, varying according to site-specific conditions, the nature of the issue, and the needs and interests of the people affected by the issue. Consequently, the most effective action plans are home-grown—developed by and for the people concerned about a particular region. Developing an action plan ensures that people are working toward a clearly stated and agreed-upon goal, and it spells out specific steps and tools for reaching that goal. A well-drafted action plan also allows people to assess their progress against the stated goals, adapt methods as needed, and document their success.

8. Implementation: a plan to move from vision to action. Once people agree on an action plan, the next step is to harness the necessary civic and political will for implementation. Participants can start by understanding how the proposed transboundary action supplements other relevant efforts. Then they need to communicate their message to appropriate audiences, making it relevant and compelling. They need to demonstrate to political leaders and other decision makers that the political capital to be gained is greater than any political risk they may take in supporting the action. Outreach should rely on multiple strategies to inform, educate and mobilize people (such as media, public events, publications, websites). Participants should also think carefully about linking their effort to established decision-making systems. Seek access to power—rather than power itself—by building bridges, coordinating actions, and doing things that would not otherwise get done. Necessary resources should be secured accordingly.

9. Outcomes: agreements, policies, programs and on-the-ground accomplishments. The most relevant outcomes will vary according to the needs and interests of each TBC initiative. Participants should be sensitive to both ‘process’ outcomes—such as building relationships and facilitating understanding—as well as ‘substantive’ outcomes—policies, programs and on-the-ground accomplishments. The desired outcomes should be explicitly articulated in the strategy or action plan, and then monitored and evaluated as implementation unfolds.

10. Adaptation: the ongoing process of monitoring, evaluating and adapting as needed. Taking action should be followed by evaluating what was accomplished. This civic learning process provides the political momentum to follow through on difficult problems. In some cases, there may be a need to sustain transboundary cooperation. Participants should begin by capturing, sharing and celebrating

their accomplishments, thereby reinforcing a sense of regional purpose and identity. Then it may be valuable to revise and renew the mission, adapting to new information, opportunities and problems. Participants will also need to identify and develop the capacities to sustain the transboundary initiative—people (both current and new members), resources (money and information) and organizational structures.

These key elements give practitioners a road map for TBC, which can help clarify where you want to go (the goal or outcome), and how best to get there (strategies and steps to achieve that goal). Given the unique needs and interests of different regions, the key elements should be adapted to each setting. This adaptation occurs in two ways (Brunner et al., 2005; Lee, 1993; Scholz and Stiffler, 2005). First, TBC initiatives emerge to close a gap in governance. They create a new platform—a home-grown forum—to integrate previously independent systems of users, knowledge, authorities and organized interests. Second, the political choices and policy decisions made by transboundary practitioners are adapted in response to experience on the ground as people learn by doing.

Taken as a whole, these key elements inform the entire process of effective TBC. It is well worth revisiting them frequently as a process unfolds. Although the actual strategies and tools used to work across boundaries will vary from one region to the next, these key elements are universal—specific enough to help people navigate the challenges of working together on a regional scale, yet broad enough to apply across a wide range of situations.

Keeping in mind that TBC is more like political organizing than rational planning, Box 1 integrates the ten key elements into four common stages of TBC. These stages help clarify other key steps along the way of TBC.

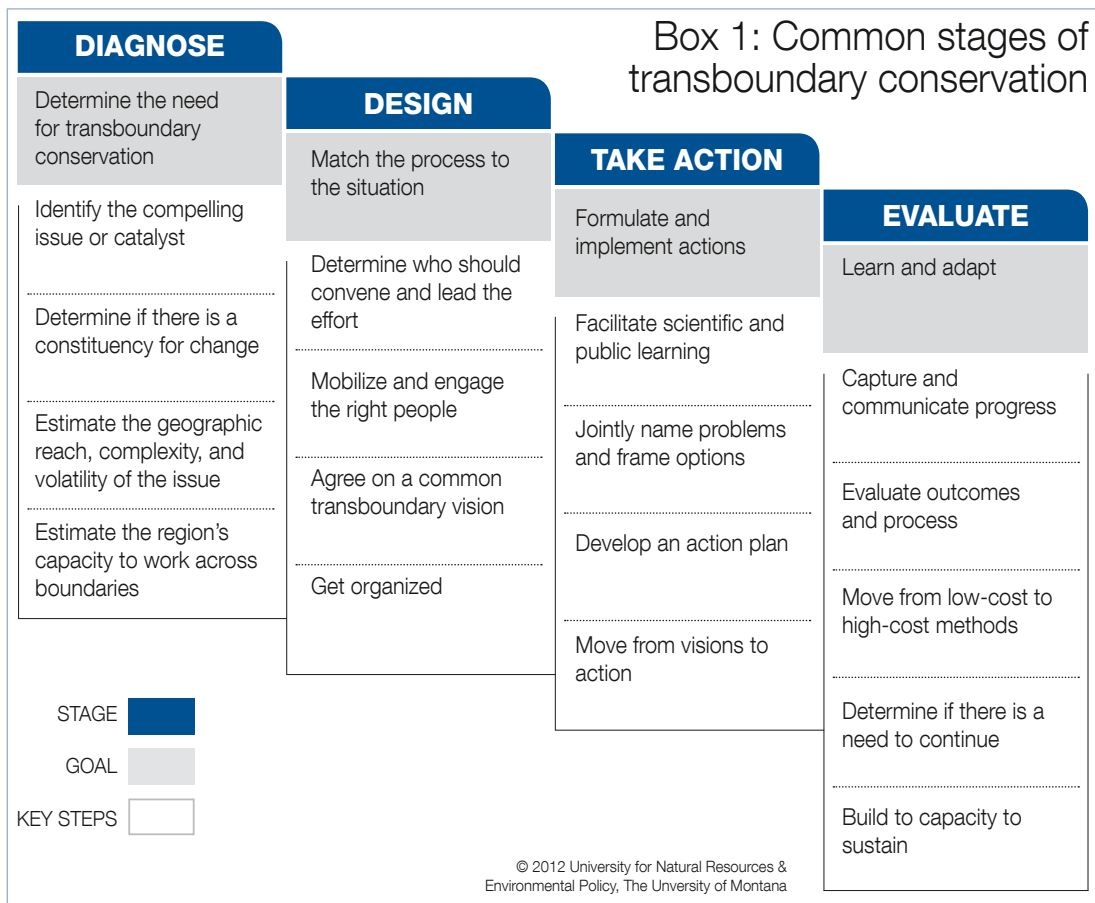
Diagnostic framework

Before initiating a TBC process, interested people and organizations should first diagnose the situation. Diving into such work without clearly understanding the problems or opportunities at hand is a recipe for frustration and probable failure. Since TBC is not only time-consuming but also costly, it is important to assess TBC feasibility before embarking on transboundary cooperation. Some objectives can indeed be more effectively met by cooperating across borders, but in some cases, it will be more appropriate for countries to work independently. Assessing whether the benefit for biodiversity conservation, for key people involved, will outweigh the cost of working across borders, will determine the need to work in a transboundary way. The basic diagnostic question at this stage focuses on element 1—why make the effort to work across boundaries? Another way to frame this question is: What compels people to consider TBC? There must be a catalyst or a compelling reason for people to want to work together.

A compelling reason to cooperate across boundaries is not enough, however. For any such effort to get off the ground, the right coordination must be available (element 2) and the right group of people must want to work together in some constructive way (element 3). In short, there must be a constituency for change. From the outset, it is important to clarify the scope of the issue that drives people to work across boundaries and to assess their collective capacity to respond to the issue and to work together.

As illustrated in Box 1, four diagnostic steps or questions determine whether particular countries need to engage in TBC, and if the key partners are ready to act. They must:

1. identify the compelling reason to act, as people in the region see it;
2. determine if there is a constituency for change (which includes determining who is interested in or affected by the issue);
3. estimate the geographic reach, complexity, and volatility of the issue, and
4. estimate the region's capacity to work across boundaries.



Diagnostic step 1: Identify the compelling issue or catalyst

TBC is tough and challenging, and many people are reluctant at first to think and act transboundary. Social and institutional arrangements impose a tremendous inertia on civic and political will. Many local issues, from property rights to land use decisions to political guidance, are embedded in systems of boundaries. It stands to reason, then, that effectively organizing and leading a regional, transboundary effort requires a significant catalyst—a compelling purpose or reason to try a new approach to addressing transboundary issues.

As a matter of principle, TBC is compelling when people realize that they are more likely to achieve their interests by thinking and acting interdependently than by acting independently. This gets to the heart of transboundary issues—by definition they are issues that no single jurisdiction can resolve on its own. It may seem obvious, then, that transboundary issues require jurisdictions to work together.

But simply saying that is easy compared to getting people genuinely to recognize and accept the need to work across boundaries. Most people strongly prefer to focus on their existing, well-defined jobs within the confines of their jurisdictions. They already feel overworked and undersupported. TBC promises to add more work, more responsibilities, and more demands on already thin resources and staff time. These real concerns can be overcome with a compelling enough purpose and some assurances that the benefits of working across boundaries will outweigh the costs.

What creates a compelling purpose? What drives people to recognize their interdependence and reach across boundaries? Research and practical experience suggest that nearly all transboundary efforts originate in response to one of two driving forces: (1) a pressure, or (2) a promising opportunity (Baldus and Hahn, 2007; van der Linde et al., 2001; van der Molen and Ietswaart, 2012). Within these broad categories are a number of more specific motivators that should be taken into account, though they typically occur as subsets of the two broad driving forces. These motivators include:

- self-interest;
- the absence of an alternative to transboundary collaboration;
- frustration with gridlock and inaction;
- public pressure and/or political opportunity to get traction;
- a shared vision, goal, or sense of place;
- a desire to close the gap between current reality and the desired future; and
- a sense of responsibility and commitment to a particular place.

In conclusion, to initiate transboundary cooperation, motivation for change is an essential prerequisite. Without such motivation for change, whether it originates in responding to certain modes of pressure, or in realizing mutual opportunities, there is no valid reason for change.

A Pressure — van der Molen and Ietswaart (2012) note three key types of pressure that can lead parties to initiate cooperation across borders. These are: problem pressure, institutional pressure and judicial pressure. While the last two have more of a political nature, problem pressure typically addresses nature conservation or natural resource management issue that needs to be resolved. For example, an emerging, long-term threat to biodiversity, watersheds or the quality of life in communities, is a problem pressure, and an important driver for transboundary conservation effort. Facing either a crisis or a longer-term threat is usually a unifying force that brings people together against one common concern, despite their differing interests. A crisis may be more immediately compelling, while a threat generally allows more time to raise public awareness and rally the troops. Some threats are so slow moving and insidious, however, that people may resist acknowledging or responding to them until they become more serious.

Prespa Park, encompassing Prespa Lakes and the surrounding catchments, and shared by Albania, the Former Yugoslav Republic of Macedonia and Greece, is an example of growing trilateral cooperation that resided from an emerging threat. The area used to be characterized by unsustainable agricultural, water and land-use practices, excessive fishing and forestry. All of this led to degradation of key habitats and threats to globally significant species (Ivanovski, 2011). This situation, threatening for the Prespa ecosystem, called for a change, and this change was brought forward under the framework of transboundary initiative. The countries now work through the Prespa Park Coordination Committee for the conservation of Prespa Lakes, striving to improve environmental conditions and create opportunities for economic development of local communities.

Regulation of river system management was one of the main reasons for establishing transboundary cooperation between Thayatal National Park in Austria and Podyjí National Park in the Czech Republic. The hydropower plant that runs in hydro-peaking mode in the Czech Republic greatly affected and disturbed the ecosystem of the Thaya River. The two national park administrations worked together, with other key stakeholders, the Austrian-Czech Border Water Commission, the hydropower plant owner and the Czech river management authorities to negotiate a higher minimum water flow which lessens the impact of energy production on the fragile river ecosystem (Brunner, 2011). A long-term threat to the ecosystem was reduced by cross-border cooperation, though still leaving room for more improvements. As a result of the long-standing cross-border cooperation between the two parks, this transboundary site has been certified under the EUROPARC's process 'Transboundary Parks - Following Nature's Design'.

A Promising Opportunity — In the arena of transboundary conservation, the only thing more challenging than a crisis may be the lack of one. The second driving force for transboundary conservation, then, is the desire to capture or build on opportunities. This catalyst is more proactive—it asks people to work across boundaries before a problem arises. Unfortunately, it is also often perceived as the least compelling reason to collaborate.

The Crown of the Continent is an 18 million acre transboundary region centred in the Glacier and Waterton Lakes National Parks in the state of Montana, USA and the Canadian provinces of Alberta and British Columbia. Beginning with the creation of the world's first "international peace park" in 1932, land managers and local citizens alike recognize that they live, work, and play in a special

landscape. This realization—more than any specific crisis or threat—galvanized action to protect and preserve the ecosystem and the surrounding communities and economies. Over the past 20 years, environmental educators have come together to teach future generations about the natural and cultural heritage of the region; colleges and universities in the region have come together to inspire and train future transboundary conservation coordinators; resource managers in more than 20 federal, tribal, provincial, and state government agencies participate in the Crown Managers Partnership, a voluntary partnership aimed at sustaining the ecological health of the region; business leaders have come together with the National Geographic Society to promote and sustain the region via geotourism; and the Roundtable on the Crown of the Continent emerged to connect all of these independent initiatives.

Cooperation between Alpi Marittime Nature Park (Italy) and Mercantour National Park (France) represents one of the most successful transboundary conservation initiatives in Europe. Twinned since 1987 and united by a 33 km long border, the parks share a common history, with vast areas within them derived from an old hunting reserve of King Vittorio Emanuele II of Italy (created in 1857) (Hamilton et al., 1996). This fact triggered the two countries to unite their efforts in protecting this mountain massif and its biodiversity, and to seek joint opportunities underpinned by the transboundary nature of this area. Among other fields of cooperation, the parks today have a joint advisory committee, share scientific work, organize social events and protected area staff exchange programs. They also jointly apply for EU funding and implement projects together.

When organizing around an opportunity, many initiatives walk a fine line between raising awareness of looming problems and potential threats and highlighting the unique qualities and assets of a transboundary area. Also, they often laud the many benefits of collaboration itself: improved working relationships, economies of scale, reduced costs through resource sharing, and so on.

No matter how compelling a pressure or opportunity may be, such a catalyst alone is not enough to initiate a TBC effort. In fact, identifying a compelling purpose or interest is just the first step.

Diagnostic step 2: Determine if there is a constituency for change

The second diagnostic step is to determine whether there is a constituency for change. In short, is there a critical mass of people aware of a common crisis, threat, or opportunity, and ready to work together in response? This raises several additional questions: Who is interested in or affected by the issue? What jurisdictions and decision makers are needed to implement any outcome? Who might undermine the process or outcome if not included?

Once you identify the range of potential actors or constituents, the next step is to clarify their needs and interests. Are their interests similar, different but compatible, or conflicting? The classic book on negotiation, “Getting to Yes: Negotiating Agreement Without Giving In, explains how to clarify people’s interests” (Fisher and Ury, 1981). Taking the time to understand those interests reveals whether they are interdependent and whether TBC is the best option for achieving them. The greater the degree of interdependency and the fewer options people have, the greater the likelihood that transboundary cooperation is appropriate.

Naturally, not all transboundary conservation issues will require a transboundary cooperative approach. In the final analysis, it is important to identify which issues require a transboundary approach, and then all parties should agree on the basic nature of the challenge even though they may disagree on why a particular issue is important and compelling. Also, people must believe that they are more likely to advance their interests through regional collaboration than by acting unilaterally.

Diagnostic step 3: Estimate the geographic reach, complexity and volatility of the issue

The next diagnostic step is to estimate the geographic reach, complexity and volatility of the regional issue or opportunity. It is important to clarify up front whether the issue can be framed in such a way

that it captures the territory of the problem or opportunity, resonates with people, and is workable. There is a tendency in many transboundary initiatives—particularly at the outset—to become so enamoured with boundaries that one forgets what they represent.

Foster (1990) claimed that “...problem-solving is what regions are all about. They serve merely as the rationale for getting something done... Boundaries are important, but for reasons that transcend those of the region itself. Human beings, for some innate reason, feel more comfortable functioning within defined parameters. It is intrinsically important for them to belong somewhere”.

That said, people often spend too much time and energy hovering over maps trying to delineate a precise regional boundary. While transboundary protected areas generally encompass protected areas that are either adjoined or adjacent to each other across boundaries of states, transboundary conservation initiatives can involve protected areas further away from the national boundaries.²¹ Normally, these protected areas that share a vision and cooperate for a common benefit have similar problems, share an ecosystem, or have other comparable issues that provide incentive for cooperation. However, the geographic reach of a single transboundary conservation area is discussable, as the precise criteria for the range or distance between protected areas across boundaries are not set. In reality, many well-functioning regions have multiple identities and fuzzy or shifting boundaries. There is no reason why some protected areas should be excluded from a particular transboundary conservation area if motives for shared management are practical and rational.

Delineating the precise boundaries of a transboundary conservation area is usually less important than clarifying the core area of interest and activity. Moreover, boundaries do not have to be exact and can even be fluid as the nature of the problem and people’s interests change. However, during this diagnostic step, the idea is to develop a preliminary sense of the territory of the problem and to clarify the complexity and volatility of the issue. How many jurisdictions might be involved? What is the history of relationships among potential participants? Do they have a track record of working together or not getting along? What do we know (or not know) about the scientific and technical aspects of the issue? These and similar questions can help diagnose the scale of the issue and the need for collaboration.

Diagnostic step 4: Estimate the area’s capacity to work across boundaries

The fourth and final key diagnostic step is to establish whether the relevant countries have the capacity to work across boundaries. The focus of this analysis is not on determining whether the key partners currently have the capacity to achieve its ultimate goals, but on whether they have sufficient resources to get the ball rolling and build the necessary capacities over time. A first step is to inventory the area’s assets, particularly funding, organizational capacity (such as the ability to network, manage mailing lists and phone trees, and convene meetings), and basic information (e.g., maps). It is also important to ascertain how much people know about the issues and who is best able to influence other people.

Just as no single person or group is likely to have the power or authority to address a regional issue, no one will likely have all the necessary resources. The best way to assemble these resources is to identify what assets various partners are willing to share and bring to the effort, and what, if any, resources are missing.

This inventory should be weighed against a clear picture of the major barriers to transboundary collaboration and how they might be overcome. A related consideration is how external events, such as political factors and ecological imperatives, might affect the scope and timing of any regional effort. Finally, reflect on what can be learned by past attempts to address this issue. There may be pitfalls to avoid as well as opportunities to leverage.

21 For elaboration on defining the types of transboundary conservation, please see Chapter 2.1

Methods to determine readiness

In some cases, a region may be able to uncover answers to these diagnostic questions with the existing knowledge and information. However, this is not always possible. Also, people considering launching a transboundary effort may want to crosscheck their understanding of the issues and drivers against a larger group of stakeholders. Doing so helps ensure the legitimacy, credibility, and transparency of any subsequent work.

One way to assess the feasibility to initiate TBC is to complete the diagnostic questionnaire presented in Chapter 3.2. This practical framework provides a suggested set of questions and issues to consider in assessing the feasibility for TBC. While there are many publications available that offer descriptive guidance to developing TBC, all of which the authors consider important and valuable, this particular tool, in comparison to the other available resources, is specific in that it provides: a) a qualitative assessment based on quantitative methodology and b) rapid self-assessment possibility.

The questionnaire was developed for the purpose of this publication as a practical addition to the diagnostic framework presented in this chapter, and with the aim to guide TBC efforts in the South-Eastern European region, with potential application to other regions worldwide. It is partly adapted from UNEP's Assessing the feasibility of establishing Transboundary Protected Area–Gap and opportunities analysis,²² and the structure is based on the diagnostic framework presented in this publication. It is a work in progress and needs further testing on the ground, thus any feedback received would be more than welcome in order to improve the tool in the future. UNEP's framework is a qualitative framework best used by third parties not directly interested in the particular TBC that is being assessed (e.g. facilitator or consultant), who can report to and advise the initiators of TBC based on the surveyed questions. The questionnaire presented in this publication is designed to offer conclusions based on the quantitative methodology, and we see it as one of the key advantages. We are aware of the risk by offering such an approach and possible criticism in that TBC is too complex and depends on many factors that the statements resulting from quantitative assessment might be too 'simple'. That said, 91 questions were designed in such a way to attempt to assess best possibly the issues that reflect feasibility for TBC. The number of questions might seem overwhelming to someone, but the questionnaire is most likely incomplete. Many more questions could have been added that would undoubtedly bring added value to the assessment, but keeping the purpose of the tool in mind, the questionnaire was designed in such a way as to offer straightforward responses and the best possible guidance for those using it.

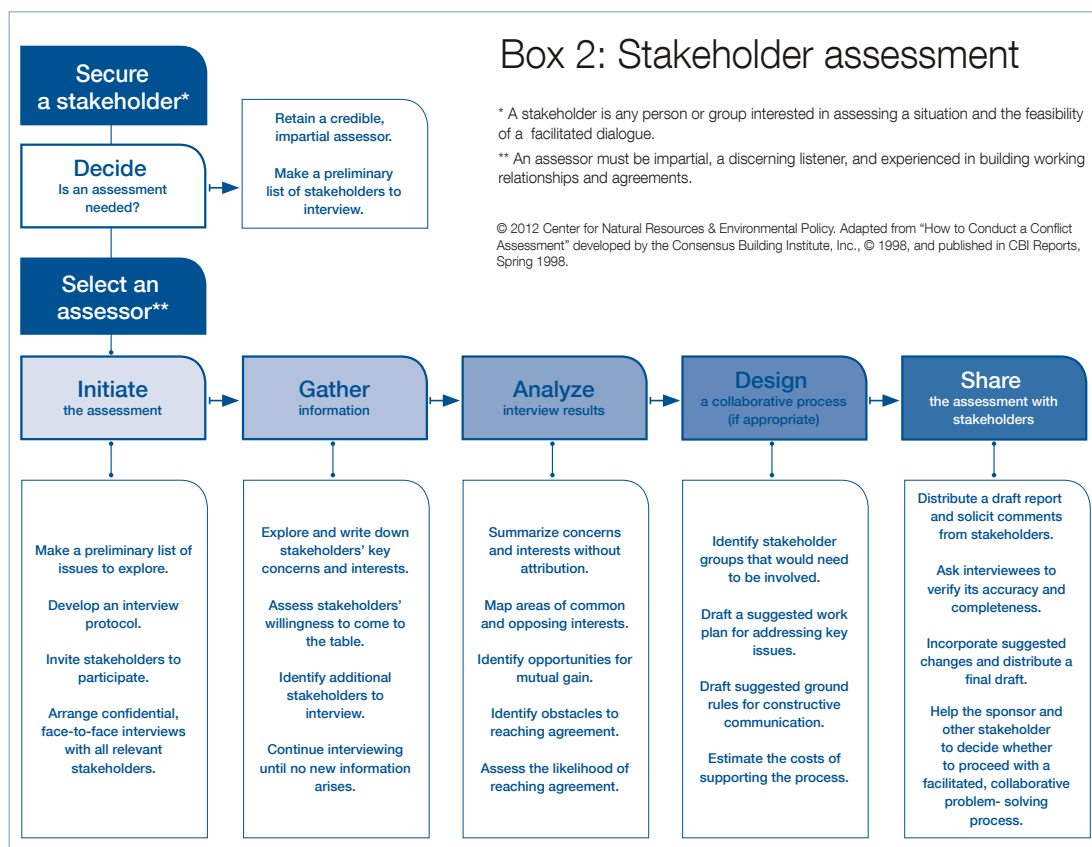
Considering that the objective of this tool is to provide guidance on the feasibility for TBC, the questions primarily assess the compelling reason(s), i.e. the need for TBC, and the readiness of parties to undertake the effort. The questionnaire also clarifies opportunities that could be generated by engaging in TBC, including those opportunities that could accelerate the process, as well as risks that could hinder the process. Opportunities and risks are assessed separately in each part of the questionnaire: i.e. for 'compelling reason for transboundary conservation', 'stakeholders', 'geographic reach, regional stability and complexity' and 'capacity'.

The majority of questions are evaluated by scoring, and thus the questionnaire can easily be used by TBC stakeholders and initiators, providing them a self-assessment opportunity. For example, if protected area manager or responsible ministry or any other interested party wishes to examine the potential for TBC, by using this questionnaire they can do it on their own. The process is relatively fast, and one does not necessarily have to be a TB expert to reach conclusions about feasibility for TBC and interpret the results. Some TBC developers though wish to hire a consultant or someone neutral to advise them on the feasibility for TBC. For this particular possibility, the questionnaire contains also several 'informative' questions that are not scored. Their purpose is to fill in the consultant's potential knowledge gap related to the region.

²² Unpublished document. Available from the authors.

The questionnaire is most effective when used in combination with a stakeholder assessment. A stakeholder assessment is a practical tool that allows a potential convener—the person or organization interested in potentially catalyzing and/or leading a TBC initiative—and all other stakeholders to begin developing a common understanding of the substantive issues, the diversity of viewpoints and interests, and alternatives to TBC. It helps people understand the history and dynamics of a particular issue or situation and clarifies the incentives of the various parties to engage in transboundary collaboration.

A stakeholder assessment can also be a vehicle to help people understand the costs and benefits of acting independently rather than cooperatively. Moreover, people learn about each other's interests and values through an impartial assessment process, and this helps build understanding, trust, and working relationships.



The process of conducting a stakeholder assessment typically follows the steps outlined in Box 2. The information gathered during the assessment allows stakeholders, including the convener, to determine if the minimum conditions exist for transboundary cooperation and to begin designing an appropriate regional platform (Susskind et al., 1999). In short, a stakeholder assessment can provide answers to the diagnostic tests presented above.

To initiate an assessment, a TBC supporter—typically a coalition of organizations when it comes to regional land use or water issues—decides that an assessment would be useful and retains a credible impartial assessor. This person should be viewed by all stakeholders as nonpartisan and should have some understanding of the issues at stake and the institutional context of the issue. Assessors should be effective interviewers and discerning listeners, since interviewing is the primary method of gathering information during the assessment. Assessors should have a clear mandate from the TBC convener, including an understanding that the assessor operates autonomously and will make recommendations based on their judgment.

Working together, the convener and assessor make a preliminary list of stakeholders to interview, develop an interview protocol (using the questions presented in the questionnaire Diagnostic tool for transboundary conservation planners: "Suggested questions to determine feasibility for transboundary

conservation”) and invite stakeholders to participate. The assessor typically reviews appropriate documents to learn more about the issues and parties, and then conducts interviews, either one-on-one or in small groups of people with similar interests. Most assessors prefer to conduct interviews face-to-face, though telephone interviews may often be more practical.

Based on years of practical experience, the framing of interview questions is very important. Discovering and clearly identifying the catalyst for TBC may not be easy. Most people do not intuitively think transboundary, and the idea itself may be an unfamiliar frame of reference. Asking, “What transboundary issues does your community face?” is rarely a good communication starter. It is more apt to generate a blank stare.

A more effective question might be, “What is most important to you and your community?” Answers will vary as the question is asked across different sectors of the region, but common themes will emerge. People may name or describe various issues, some of which will be similar or related. They will also use different terms and vocabularies that reflect the nuances of their interests. It is important to capture both the shared themes and different perspectives (and terms of reference).

With a list of the most important issues in hand, participants can back into an analysis of whether these issues are truly transboundary in nature and thus may require some type of regional response. An appropriate line of questioning might go something like this:

- Does one or more of these issues cut across multiple jurisdictions, sectors, or disciplines?
- Does any single entity have the power or authority to address this issue?
- Is there an issue that can be addressed best (or only) through transboundary cooperation?

The answers to these questions begin to clarify whether there is a compelling reason to think and act regionally.

Once the interviews are complete, the assessor prepares a report that synthesizes the findings and conclusions along with one or more options on how the stakeholders might proceed. Depending on the scope of the issue and the number of people involved, the reporting format may be a conference call, a two-page memo, or a twenty-page analysis. The report is typically distributed to the people interviewed and to anyone else who might be interested in the issue. The objective of this reporting

function is twofold: to validate that the assessor has accurately captured the needs, interests, and options as articulated by the interviewees; and to determine how, if at all, to move forward. The information gathered during the assessment allows stakeholders, including the conveners, to tailor a process to match the situation. By engaging the right people and documenting their concerns and interests, an assessment is an important first step toward a credible, legitimate framing of the issues. It can also help the convener draft a compelling transboundary narrative. (For a menu of possible outcomes of a stakeholder assessment, see Box 3).

Box 3: Possible outcomes of a stakeholder assessment

Findings	<ul style="list-style-type: none"> • Inventory of range of interests and likely participants. • Clarified values, interests, and concerns of all stakeholders (including decision makers). • Identified areas of agreement and disagreement. • Clearer understanding of public perceptions of issue at hand.
Options for moving forward	<ul style="list-style-type: none"> • Identified legal, administrative, and practical (time and funding) constraints. • Identified opportunities and potential resources (funding, technical expertise, information, web support, etc.). • Range of stakeholder-suggested solutions. • Additional options identified by facilitator/assessor.
Recommendations	<ul style="list-style-type: none"> • Appropriate model or design for collaborative process. • Suggested best practices. • Forum to discuss findings, options, and recommendations. • Next steps.

A stakeholder assessment does not always lead to full-blown TBC. In some cases, the assessment will conclude that the relevant countries and partners are not ready. People may disagree over the urgency and nature of the problems; decision makers may have other priorities. Citizens may be apathetic, or may not yet see the value in working with or learning from their neighbours throughout the region. In such cases, the situation may instead be ripe for simply raising awareness and beginning to build understanding of issues and interests.

Designing the right process

Rather than assuming that a compelling catalyst exists and the issues and people's interests are known quantities, it is always best to ask the people themselves—citizens, community leaders, protected area authorities and staff, business people, government officials and elected officials. This can be done through informal surveys or through a more systematic stakeholder assessment. Either way, it is crucial before moving forward to clarify the catalyst, identify a constituency for change, estimate the geographic scope of the issue, and inventory the region's capacity for TBC.

Some people may argue that stakeholder assessments are unnecessary, expensive, and time-consuming. In certain situations, where the key issues and stakeholders are well defined and agreed upon by all parties, an assessment may not add much value. Transboundary issues are rarely that easy to pigeonhole. More often, such issues are defined by multiple parties, side issues, and jurisdictions; scientific and technical uncertainty; and a range of potential actions to address the problem—all of which create different views on what is important, relevant and compelling. The risks of proceeding without an assessment are that key parties may be left out of the process (and may later undermine it), the right issues may not be addressed or framed appropriately or the collaborative process may not be well suited to the situation.

A stakeholder assessment is more than just a diagnostic tool to determine if key partners are ready for transboundary work. It also serves as a communication tool to help build a common understanding of transboundary issues, interests and possibilities. It is also a design tool to help build the right platform given the unique needs and interests of an area.

A clear and accurate diagnosis of the situation allows participants to determine whether TBC is an appropriate response to the problem or opportunity at hand. If people do in fact feel compelled to work across boundaries—if a constituency for change exists and people are ready to start working—then the time is ripe to decide how that work will proceed.

People are often tempted to roll up their sleeves and get right to work rather than first considering the options for how that work will be accomplished. But it is well worth taking the time up front to design a thoughtful, efficient process for transboundary cooperative conservation. A well-designed process is far more likely to draw people into the effort, help them stay focused on the region and issues at hand and achieve desired outcomes.

As presented in Box 1, there are four important steps to be undertaken in the design phase of a TBC process:

1. determine who should convene and lead the effort,
2. mobilize and engage the right people,
3. agree on a common transboundary vision, and
4. get organized.

Some of this work began during the diagnostic stage. Now it is time to refine the constituency for change, the definition of the area, and the resources needed for TBC.

Design step 1: Determine who should convene and lead the effort

Once people agree that they have a compelling reason to work together, the next ingredient they tend to look for is leadership. Who is going to bring everyone together, organize the work, discuss the issue at hand and be the voice for change? What sort of leader can work across boundaries and situations with a diverse range of interests?

The traditional sense of a leader is just that—someone who holds the ultimate decision-making authority and is not afraid to exercise it unilaterally—that is, someone who wields power and tells other people what to do. But TBC requires a special type of leadership. People who catalyze and coordinate successful

Box 4: Traditional vs. collaborative leadership

Traditional	Collaborative
Exercises unilateral decision-making authority	Shares decision making
Communicates within a single network of like-minded people	Communicates among multiple networks of diverse interests
Works within a single jurisdiction	Works across multiple jurisdictions
Commits to an ideal or cause	Commits to a regional sense of place
Focuses on a limited number of issues	Focuses on a wide range of integrated but often competing issues
Seeks certainty and decisiveness	Accepts uncertainties and adapts as needed

Source: McKinney, M.J. and Johnson, S. (2009). *Working across boundaries: People, nature, and regions*. Cambridge, MA: Lincoln Institute of Land Policy.

TBC efforts must possess characteristics that resonate across jurisdictions, sectors, disciplines and cultures. Such collaborative leaders invite people to take ownership of a shared vision and values, and they work hard to bridge differences and nourish relationships. Collaborative leaders create legitimacy, credibility and capacity by broadening participation, not hoarding power. See Box 4 for a comparison of traditional and collaborative leadership styles.

To move in the desired direction, collaborative leaders share power and mobilize people, ideas, and resources. In the midst of this action,

they provide legitimacy and credibility and advocate for the integrity of TBC. They also show a high tolerance for complexity, uncertainty and change. They emphasize dialogue and the building of relationships by respecting a diversity of ideas and viewpoints. Respect builds trust, which in turn fosters communication, understanding and, eventually, agreement.

Collaborative leadership is also based on a special set of values—including inclusiveness, sharing of responsibilities, transparency, and commitment to partnering.

As a TBC initiative unfolds, different leaders may step forward at different times to fulfil different roles. Rarely is one person or one group well suited to fill every leadership role that arises. At the start of a TBC initiative, it is essential to have entrepreneurial people who see problems or opportunities and/or have a vision and the ability to make it compelling to others. It is also important at the start to find a person or group who can help create the credibility and legitimacy for a TBC initiative.

Typically, although not always, those who convene TBC initiatives are in the positions of coordinators and hold a stake in the proposed project (Susskind et al., 1999). The convener can be from any sector, but must be a credible voice across sectors, jurisdictions and disciplines. The role of the convener is often self-selected; however, an individual or organization who is interested in a specific TBC issue or outcome but who lacks the will or ability to convene an initiative can introduce the idea to those who are well positioned to launch a TBC effort effectively.

A different kind of leader may be needed to build transboundary identity, decide what to do, and generate the capacity to act. Thought leaders provide knowledge and information, while networkers mobilize and engage other people across jurisdictions, sectors and interests. When problems arise, it is important to have a facilitator to bridge differences and build agreement. Finally, every successful TBC initiative needs someone to coordinate activities, provide follow-through on action items and ensure results.

Design step 2: Mobilize and engage the right people

Transboundary conservation requires stepping outside of individual silos and working in international cooperative frameworks. For those unaccustomed to these broader horizons, the view might come as a surprise. Some of the yards are empty, their owners hidden indoors or away on travel. Other yards are full of people busy with gardening, lawn mowing, and taking out the garbage. This key element asks: When it comes time to reach out to all these people, how will you do it? Who needs to be included? How do you reach people who are not in plain view? How do you know that you have found all the 'right' people? And how do you mobilize and engage them to participate actively in the TBC effort?

To be effective, TBC initiatives must engage the right people and build a constituency for change. While such a constituency may be organized in some transboundary areas, it is not unusual for a nascent TBC initiative to help build such a constituency, either from some small beginning cluster of interested

people or from scratch. At this stage, being as inclusive as possible ensures that the initiative will be broadly supported by people with ownership in both the process and its outcomes.

What does it mean to be inclusive? In broad terms, there are three categories of people who must be engaged for a process to be legitimate, credible and effective. First are those people and groups who are interested in and directly affected by the issue; second are those needed to implement any potential recommendation (that is, those with authority); and third are those who might undermine the process or the outcome if not included. This inclusive approach garners input and support from the widest possible group of stakeholders. Being inclusive creates a sense of buy-in and ownership from the start, empowering people to participate in identifying the issues or problems, framing solutions, and determining what actions to take. This also helps to minimize opposition late in the process because all the stakeholders have had a say in shaping the proposed actions.

In these respects, building a constituency for change is more like organizing a political campaign than engaging in a conventional planning process (McKinney and Essington, 2006). A conventional planning process includes public scoping and input, but the decision makers themselves draft options, choose the preferred option, and finalize the plan. In contrast, building a constituency engages the stakeholders from the outset in naming and framing the problem and its possible solutions, and the stakeholders themselves (typically including the decision makers and officials responsible for implementation) design the proposed action. In this way, approval is built in from the beginning. When a diverse, broad-based constituency guides the process, it will more likely produce outcomes that all participants can live with.

Engaging the right people also means recruiting people with vision, passion and commitment. Who are the champions or boosters in the transboundary area? They are likely to be civic leaders, though potential champions might also be government and elected officials, business owners or ardent volunteers. They may be people who embody the values of collaborative leadership, or those who have the skills and aptitude to fill the different roles typical of most TBC efforts. Sometimes an organization can be a champion even when no one person within the group plays that role. Organizations provide a low-profile way for people to contribute actively while remaining anonymous, or at least sharing the limelight with a team.

In many areas, a nascent sense of transboundary identity and perhaps even a constituency for change already exist, although the constituency may be scattered and disorganized. To begin shaping a more cohesive constituency, avoid reinventing the wheel. Build on any existing social networks that already span sectors, institutions and disciplines. Convene people to identify issues, share aspirations and build relationships.

In some cases, a slightly different approach is more effective. When an opportunity (rather than pressure) is catalyzing regional action, it often makes sense to first build a coalition among people with similar interests, roles or responsibilities before mobilizing and engaging other stakeholders. In the transboundary area known as the Yellowstone to Yukon Conservation Initiative (Y2Y) in the USA and Canada, for example, the core actors are conservation organizations, which then reached out to governments, businesses and others interested in or affected by selected conservation issues.

These types of coalitions need to be mindful of engaging the right people, again erring on the side of being more rather than less inclusive. It might be helpful to think in terms of a series of concentric circles and levels of representation. The innermost circle is the core group or coalition (e.g., conservation groups in the Y2Y initiative). In the next circle are other key stakeholders who might be needed to implement any recommendation or outcome and/or those who might undermine the process if not included. In this respect, it is critical to acknowledge the authority of existing institutions and decision makers and to engage them appropriately. Finally, the largest circle includes the general public. The challenge here is to inspire and engage residents of a particular place. It is also important to keep in mind that there may be people and organizations outside the transboundary area who need or want to be involved.

This coalition approach to representation allows the core group to build a sense of identity and purpose and to shape an initial course of action. The risk is that people not included in the core group—other stakeholders or the general public—may feel alienated if not included in the initial naming of problems and framing of solutions. Once alienated, it may be difficult to fully engage some people in a constructive way. This is particularly true in reference to existing jurisdictions and decision makers. If the intent of a TBC initiative is to shape or influence policy it is essential to link the effort to the appropriate formal decision-making process and/or institution (McKinney and Essington, 2006). Government participation in such efforts is essential, but it need not drive the effort. Both top-down and bottom-up efforts can be successful, as long as they are strategically linked to the formal decision-making process.

Design step 3: Agree on a common transboundary vision

Feasibility for transboundary approach was determined in the diagnostic phase of transboundary conservation development process. It was decided to engage in a transboundary process because either opportunity awaits the concerned protected areas, surrounding communities and countries, or an ecological crisis and/or a threat will be mitigated by the process. While designing the transboundary conservation process, coordinators and key stakeholders were identified and engaged in the process from its beginning. Now it is time to create a shared vision based on which the transboundary initiative will develop. What is a long-term vision for the area? How should the region look in 10 or 20 years from now? What is the desired state of the environment, social and economic circumstances?

Developing a common vision for a region is neither a one-way process nor a one-way decision involving only a single country. In order to ensure future success of the transboundary initiative, developing a vision must be a joint process between future partners. For example, a vision can be developed during a workshop that gathers major stakeholders from the proposed transboundary area from all concerned countries. As many stakeholders as possible should be involved, including strong local participation, which will strengthen democratic processes and future community ownership and/or connection to the initiative (Marczin, 2007). One way of organizing this is that each participant proposes their personal vision for the area, which is then grouped based on common points discussed by the participants and the final content of the shared vision can then be agreed upon. Another way to reach an agreement on the common vision is to organize small working groups that discuss and agree on their vision. Each working group then presents the vision in a plenary and the plenary agrees on the final elements to be contained in the vision. Normally, it is good to dedicate the final drafting of the text to a subgroup. There are surely other effective ways to reach agreements on the common transboundary vision. What must not be forgotten in this process is that common vision is shared by all interested parties, and thus the procedure of agreeing on the vision must be a joint effort.

Indeed, there are examples where stakeholders from one country aim to develop a vision concerning a potential transboundary conservation area without being able to involve their neighbour. The Republic of Korea, in its effort to conserve the Demilitarized Zone (DMZ) and cooperate with the Democratic People's Republic of Korea (DPRK) for the common benefit, held a number of meetings at the national scale with the objective to discuss future steps in establishing TBPA's alongside the DMZ. The outcome of the International Conference on Conservation and Peaceful Use of the Korean DMZ (Goseong, 2010) included adoption of the Framework for Action, containing the recommendation to the Republic of Korea to draft a vision for the DMZ (Korea National Park Service, 2010). This vision would be developed in the Republic of Korea initially and then later shared with partners in the DPRK. While this approach is not usually practiced worldwide, it can occasionally motivate potential future partners in a neighbouring country to fasten their own decision to engage in a transboundary initiative. Nevertheless, once the other party decides to engage in the initiative, the vision needs to undergo revision and a new round of agreement, though this time as a joint activity.

Agreeing on the transboundary vision is an important step forward in strategic planning for the region, including development of management plans and monitoring plans. It emerges from careful analysis of the needs and priorities for the transboundary programme, including examination of ways to decrease

threats and realize opportunities, and to identify biodiversity management objectives and targets (van der Linde, 2001). Common vision resides on a shared value, be it a shared species, ecosystem service, landscape value or the like (Sandwith et al., 2001). Creating a shared vision and action plan is a complex task, but this creative process generates many benefits. It fosters communication, trust, and a sense of regional identity; improves people's understanding of transboundary issues and options for the future; builds social and political capital; and gives participants practical experience on how to work together deliberatively. It is not only about agreeing on the content of the common vision, but also about the joint realization and understanding that the situation on the ground should be improved, policies changed and a better future built. These challenges, arising due to the very nature of working across boundaries, can be overcome if the proponents of the initiative anticipate potential obstacles to implementation of the vision, prepare a proactive implementation strategy and link the regional effort to formal decision-making arenas.

As a start, the implementation of the common vision by moving to action will depend largely on the next step—the ability to get organized.

Design step 4: Get organized

Given that TBC brings together people and groups from multiple jurisdictions, sectors and disciplines, it is critical to be clear about how the communication will be conducted. The more diverse and complex the communication is, the more it helps to articulate a common understanding of the goals, roles and responsibilities of the participants. In short, the participants need to get organized by clarifying operating protocols and a communications strategy and assembling the necessary resources (i.e., people, skills, information and funds), preferably before they jump into dialogue on the substantive issues.

Being deliberate at this stage can prevent many problems from cropping up later. Getting organized ensures that the participants will have clear and common expectations about the purpose of the forum and their roles and responsibilities. It provides the rules of the road. At this point in TBC, it is important to go slow to go fast. Most people will want to start discussing the substantive issues almost immediately. However, if they do not agree on the structure of their communication, they may get muddled in procedural disputes in the midst of doing substantive work. By documenting roles and responsibilities at the outset, getting organized provides a baseline against which progress can be measured. It also facilitates communication and clarifies which resources are needed for TBC. In the context of TBC, organizational strategies may take various forms, including a work plan and set of ground rules, memorandum of understanding (or terms of agreement) or a business plan.

Regardless of the name, an organizational strategy is most often developed by the participants during the process of the stakeholder assessment; it is then revised and adopted during the first few stakeholder meetings.

Clarify operating protocols — Operating protocols ensure that the participants have clear and common expectations about the purpose of a regional initiative and the roles and responsibilities of the participants. It is best for the participants to develop the operating protocols themselves, perhaps with the help of a facilitator. Typically, the protocols are revised and refined the first few times people meet. The process of developing such protocols helps participants learn to work with and trust one another and also allows them to develop some understanding of each other's needs and interests.

The basic issues and questions that should be addressed in operating protocols for a TBC platform are described by Susskind and Cruikshank (2006):

- Identify participants and the constituencies they represent.
- Specify participants' responsibilities to each other and to their constituents.
- Clarify ground rules to govern behaviour.
- Agree on how decisions will be made.

- Clarify the tasks of a regional facilitator.
- Agree on organizational management.
- How will agendas be created, meetings recorded and documents distributed?
- How will the initiative engage in mutual learning and joint fact finding?

Assemble the necessary resources — Many (if not most) TBC efforts start out as informal networks or partnerships before evolving into more formal organizations. Nevertheless, even informal networks and partnerships need resources—people, skills, information and funds, to name just a few. While some TBC efforts may be embedded in well established organizations, the more common experience is to borrow or leverage the resources of existing organizations to build a collective capacity (Porter and Wallis, 2002). The following questions can help assemble the necessary resources:

- What resources—people, skills, information, funds—are needed and available to work across boundaries?
- Where can additional resources be found?
- Who can help identify sources of funds and assistance?
- How can available resources be used to stimulate more interest in the project?

While some TBC efforts are supported by borrowing, mixing and leveraging resources from participating individuals and organizations, others rely on grants from foundations and governments. One strategic question faced by any potential donor is whether it is more effective to invest in existing institutions, which may treat TBC as simply one more thing to do, or to invest in creating new networks, partnerships or organizations.

Prepare a communications strategy — Whenever two or more people work together toward a common goal, they must communicate. In informal situations, we do not think much about how that communication happens or precisely what form it takes. But in any serious effort to work on a transboundary scale, with all the attendant complexities of multiple players, diverse interests, jurisdictional boundaries, and intertwined issues, effective communication rises to the fore as a critical component for success.

Thoughtful, strategic communication allows us to: (1) identify the compelling issue(s) that will galvanize people to work across boundaries; (2) raise public awareness and interest; (3) build a constituency for change; (4) keep partners and constituents informed; (5) build political support; (6) organize and coordinate efforts among diverse interests; and (7) link outcomes to formal decision-making processes. In short, communication is how every aspect of TBC work gets done, following a series of basic steps:

- Determine purpose: decide why you want to communicate—what do you hope to achieve?
- Identify audience: with whom do you want to communicate?
- Do a reality check: consider time, budget, staffing, other resources, and political constraints.
- Choose the right tools: match communication tools to specific purposes and audiences.
- Learn and adapt: seek feedback, and refine and adapt your communications as needed.

These same ingredients apply to any communications strategy, but they become even more crucial for success when working across a transboundary area that spans boundaries among jurisdictions, interests, areas of knowledge, culture and even language. To be able to work and foster cooperation across these boundaries, it is important to find a common vocabulary. Basic concepts often demand the most care in choosing that vocabulary. In the Crown of the Continent, for example, people rallied around regional stewardship but not regional conservation. Similarly, they embraced the notion of networking, while collaboration sounded too formal and coercive. In short, how the message is framed can be as important as the message itself if you want to reach your intended audience.

Focusing on communications also helps to spotlight logistical barriers that crop up when working across boundaries. Some government agencies, for instance, maintain firewalls and spam blockers that effectively stop any emails with more than one address in the 'To' field. There may also be protocols prohibiting the sharing of phone numbers, street addresses, and other contact information.

Crossing international boundaries for meetings and conferences often requires travel requests to be filed and approved weeks or months in advance, and travellers must obtain passports or visas. Such barriers exist at nearly every portal to transboundary communication—it is the nature of boundaries. Consciously thinking about how you will address these barriers can prevent or at least reduce difficulties.

Conclusions

Initiating and designing a TBC process should be a conscious, deliberate activity that is not left to chance. It is also best undertaken by the participants themselves, convened and organized by people who are willing and able to lead such an effort. Although these ideas may seem obvious, being explicit about the choices made during the initiation and design phases helps to ensure that the process remains open, transparent and equitable.

Taking stock at the outset of any TBC effort of what capacities and resources will be needed allows people to identify what assets they may already have and to acknowledge which resources and skill sets are lacking. Although this step is easily and too often skipped, it need not be arduous. Regardless of the form taken by the final design and organizational strategy, capture these details in writing. They will become an important baseline upon which to look back, a record of promises made, and an accounting of which ideas worked and which were less fruitful. In the whirlwind of working across boundaries, nailing down such information is the best way to keep track of where you have been and to see a clear way forward.

3.2 Diagnostic tool for transboundary conservation planners: Suggested questions to determine feasibility for transboundary conservation

*Maja Vasilijević*²³

Introduction

Transboundary conservation (TBC) requires cooperation across state boundaries and due to the nature of boundaries, developing and implementing a transboundary initiative can be complex and often difficult. Careful planning of the initiative prior to taking action can significantly contribute to the success and effectiveness of transboundary conservation, while also reducing the potential risks. Therefore, one of the recommended actions for initiators of TBC is to first diagnose the situation by determining feasibility for TBC before actual establishment of the cooperative process. This questionnaire offers guidance in diagnosing the situation. Its key features are that it is a qualitative assessment based on quantitative analysis and it allows for self-assessment.

Aim of the questionnaire

This questionnaire is a practical tool that assesses feasibility for transboundary conservation. It is designed in such a way to assist protected area authorities, governments, non-governmental organisations, local communities, and other interested parties in examining their readiness to initiate a TBC, while not neglecting the reason(s) for TBC, and the accompanying opportunities and potential risks. That said, the questions examine the following elements leading to conclusions about the feasibility for TBC:

1. the need for TBC;
2. readiness of stakeholders to initiate TBC;
3. opportunities that could speed up the process and/or be generated by TBC, and
4. risks that could slow the process.

Who should complete the questionnaire

It is recommended that the questionnaire be completed by stakeholders who intend to initiate the TBC process, whether they are protected area authorities, local governments, NGOs, international organisations or any other TBC process initiator. However, the diagnostic process of the TBC initiative has to be participatory and include consultations with all interested parties that might be involved in or affected by the envisaged process. The more participatory the diagnostic process, the more likely you will arrive at a well-grounded conclusion about when and how to proceed about TBC. Thus, it is strongly suggested that this questionnaire be supplemented by a stakeholder analysis, which should form integral part of this tool. Stakeholder analysis is best performed by organising a meeting and consulting directly with key stakeholders.

How to conduct the self-assessment

The questions presented herein are standardised and not tailored to any particular area. Please try to answer each question, whether it is applicable to your case or not (if it is not applicable, circle the appropriate point, i.e. 0–Not applicable).

²³ This diagnostic tool was developed with the support of Antonio Vasilijević, Eco Horizon NGO, in developing the scoring methodology, and in consultation with IUCN WCPA TBC SG members and Boris Erg, IUCN-SEE Director. It is partly adapted from UNEP's Assessing the Feasibility of Establishing Transboundary Protected Area - Gap and Opportunities Analysis (undated publication available from the authors) and based on the diagnostic framework of the TBC process presented in Chapter 3.1 of this publication.

The questions in the questionnaire are either:
 'CR', 'S', 'G', 'C' (Compelling reason, Stakeholders, Geographic reach, Capacity)–questions that carry a certain number of points, and the answers are used in the overall scoring; or
 'I' (Informative)–questions that require descriptive responses.

The symbols 'CR', 'S', 'G', 'C' or 'I' are provided in the right hand column of the table.

All questions marked with 'CR', 'S', 'G', 'C' allow easy and rapid self-assessment by calculating the number of points gathered after completing each section of the questionnaire, according to the instructions given below the table. The advantage of this tool is that stakeholders wishing to examine the feasibility for TBC in their particular region can rather quickly and relatively easy check the state of the situation.

Informative questions marked with 'I' enable more comprehensive information gathering that would provide more in-depth information should the TBC initiators wish to engage an external facilitator or consultant to evaluate the feasibility for TBC.

Results

After completing this questionnaire, the scores gathered by circling the points in each relevant question result in the appropriate conclusions/statements.

'CR' questions respond to Compelling reason for transboundary conservation
 Objective: To determine the need for transboundary conservation.

'S' questions respond to Stakeholders
 Objective: To identify and start to involve stakeholders, including the identification of interaction between them and their interests.

'G' questions respond to Geographic reach, regional stability and complexity
 Objective: To determine the scale and complexity of the issue, and the regional situation that might impact transboundary cooperation.

'C' questions respond to Capacity
 Objective: To estimate the readiness of key stakeholders by evaluating their technical capacity, resources, and knowledge/skills.

The evaluation and interpretation of results is provided for each of these sections in the accompanying table after the questionnaire. It is recommended that these tables be completed and a narrative report prepared to outline the informative answers, and those describing needs, opportunities, risks and readiness in a clear and simple manner (see Annex I).

Comprehensive guidance to the evaluation and interpretation of results is provided below the table.

Website

This diagnostic tool is available in electronic format that also offers automated report generation. The electronic edition is available at the following websites: <http://www.tbpa.net> and <http://www.dinaricarc.net>

Abbreviations and acronyms			
CR	Compelling reasons	C	Capacity
S	Stakeholders	I	Informative questions
G	Geographic reach	TBPA	Transboundary Protected Area
		TBC	Transboundary conservation
		N/A	Not applicable

Prepared by: Institution/organisation	
Date:	

Questions to determine feasibility for transboundary conservation		
1.	a) Name of the protected area	I
	b) Country	
2.	Name of the potential transboundary protected area (TBPA), if known	I
3.	a) Geographical position of the area	I
	b) Please state the size of the protected area(s) forming the potential TBPA in your country.	
4.	Please list the authorities responsible for management of the protected area.	I
5.	a) Is this protected area connected or adjacent to another protected area across the international boundary? 3–Yes; 2–Foreseen in the near future; 1–No ²⁴	CR1
	b) If yes, please provide the name of protected area and the neighbouring country.	I
6.	Is any community conserved area part of the planned TBPA?	I
7.	What are the natural values of this area?	I
8.	Would transboundary cooperation help to protect, restore, maintain or sustainably use any shared habitats and/or ecosystems? 5–Yes, significantly; 3–To some extent; 1–Not at all; N/A–Not applicable	CR1
9.	Do any species of conservation importance in this protected area have a territory that spans the state boundary? 3–Yes; 1–No	CR1
10.	a) Would transboundary cooperation help to improve the conservation status of threatened species (according to the IUCN Red List of Threatened Species™ and other recognised global/regional/national species evaluation systems)? 5–Yes, significantly; 3–To some extent; 1–Not at all; N/A–Not applicable	CR1
	b) If yes, please list these threatened species.	I
11.	a) Would transboundary cooperation help to improve the conservation status of species of conservation importance that span the state boundary? 5–Yes, significantly; 3–To some extent; 1–Not at all; N/A–Not applicable	CR1
	b) If yes, please identify these species.	I
12.	Are there restrictions to wildlife movement across the state boundary due to man-made boundary demarcation or features (e.g. road, fence, border markers)? 3–Yes; 2–Partially; 1–No	CR1
13.	Could wildlife movement across the boundary be improved by transboundary cooperation? 5–Yes; 3–Partially; 1–No	CR1
14.	Does this protected area face threats (e.g. man-made threats, natural hazards)? If yes, which ones?	I
15.	Would threat(s) (including common threats) be mitigated by transboundary cooperation? 5–Yes, significantly; 3–To some extent; 1–Not at all; N/A–Not applicable	CR1
16.	Do the threat(s) impact the social, economic, institutional and political dimensions? 3–Yes, significantly; 2–To some extent; 1–Not at all	CR1
17.	Is there any pressure (political, public, and/or judicial) to initiate transboundary cooperation in concerned region? 3–Yes; 2–To some extent; 1–Not at all	CR1
18.	Are the management priorities and objectives of protected areas on each side of the state border similar? 5–Yes, significantly; 3–To some extent; 1–Not at all; N/A–Not applicable	CR3,4

²⁴ Please consider streamlining your efforts to assist the neighbouring country establish protected areas as one of the key first steps in your future transboundary initiative process.

19.	a) Please identify any potential opportunities for cross-border cooperation related to protected area management (please see Annex II; e.g. fire management, control of invasive species, monitoring of species, sharing of equipment, etc.).	I
	b) To what extent would transboundary management of opportunities detected in question 19a) be beneficial for your protected area? 5– Extremely beneficial; 3–Beneficial to some extent; 1–Not at all	CR1
20.	To what extent would transboundary management of opportunities listed in question 19 be beneficial for local communities? 5– Extremely beneficial; 3–Beneficial to some extent; 1–Not at all	CR1
21.	a) Does the region share any distinctive natural/landscape phenomenon which could be recognised as a common feature of the proposed TBPA? 5–Yes; 1–No	CR3
	b) If yes, which one(s)?	I
22.	Do the cultural values in the concerned region face any threats? If yes, which one(s)?	I
23.	Would addressing the threat(s) to cultural values benefit from transboundary cooperation? 5–Yes, significantly; 3–To some extent; 1–Not at all; N/A–Not applicable	CR1
24.	a) Are there any social issues (e.g. disputes on access to resources) in the concerned region that could hinder the development of transboundary cooperation? 1–Yes, significant; 3–Yes, some; 5–None	CR4
	b) If yes, which one(s)?	I
25.	Are there any potential conflict issues between the local populations across the border to be resolved or mitigated in the course of the development of transboundary cooperation? 5–Yes, significant; 3–Yes, some; 1–None	CR3
26.	To what extent do different forms of land ownership and/or land management rights in the national part of the proposed TBPA and its buffer zone cause difficulties in TBPA establishment? 1–Significantly; 3–To some extent; 5–Not at all	CR4
27.	What are the relations between the local communities in the concerned countries? 5–Friendly; 3–Neutral; 1–Conflicting; 0–No relations	CR3,4
28.	What are the relations between the local governments in the concerned countries? 5–Friendly; 3–Neutral; 1–Conflicting; 0–No relations	CR3,4
29.	Could any regional cultural or social events gathering stakeholders from different national parts of the proposed TBPA be used to strengthen social relations among local communities from concerned countries? 5–Yes; 3–To some extent; 1–No	CR3
30.	a) Does the region share any elements of cultural heritage which could be useful for building the common regional identity? 5–Yes; 1–No	CR3
	b) If yes, which one(s)?	I
31.	Are there disparities in the employment and welfare situation of the local population in the proposed TBPA in your country, in comparison to the neighbouring country? 1–Significant disparity; 3–Disparity to some extent; 5–No disparity	CR4
32.	What are the main sectors of the local economy that are of predominant importance for subsistence and/or meeting economic demands of the local inhabitants?	I
33.	Which traditional natural resource use practices are of predominant importance for subsistence and/or meeting economic demands of the local inhabitants?	I
34.	Are there any possibilities for developing, exchanging and promoting traditional products in the region? 5–Yes; 3–To some extent; 1–Not at all	CR3
35.	Do you see the possibility of mutual cooperation in joint marketing and joint promotion of the region? 5–Yes; 3–To some extent; 1–Not at all	CR3

36.	Are there any possibilities for establishing a common tourism infrastructure (e.g. visitor information centre, common tourist trail) across the state border? 5–Yes; 3–To some extent; 1–None	CR3
37.	Are there any major political issues that might hold back the process of transboundary cooperation establishment? 1–Yes; 3–To some extent; 5–None	CR4
38.	How would you describe the current political relations between the concerned countries? 5–Friendly; 3–Neutral; 1–Conflicting; 0–No relations	CR3,4
39.	Could a transboundary initiative in your region enhance political relations between the concerned countries? 5–Yes; 3–To some extent; 1–No/Not applicable	CR3
40.	If there are political tensions or conflicts between the countries, could a potential TBPA act as reconciliation element? 5–Yes, significantly; 3–To some extent; N/A–Not applicable/No	CR1,3
41.	How good are the informal relationships between protected area managers? 5–Friendly; 3–Neutral; 1–Conflicting; 0–No relations	CR3,4
42.	Please assess the similarities and disparities between the national legislation on nature conservation in your country and the neighbouring country/countries involved in the planned TBPA. 5–Identical/Very similar; 3–Similar to some extent; 1–Completely different	CR3,4
43.	Do any official agreements and/or treaties (e.g. conventions, bilateral treaties, memoranda of understanding) signed between governments (central, regional, local) of the concerned countries provide for transboundary cooperation? 5–Yes; 3–To some extent; 1–None	CR3
44.	Do any agreements on certain aspects of protected area management between the nature conservation authorities exist? 5–Yes; 1–No	CR3
45.	Would transboundary cooperation help reduce the extent of illegal activities across the state border (e.g. cross-border poaching, movement of illegal immigrants, illegal trade), if such occur? 5–Yes, significantly; 3–To some extent; 1–No; N/A–Not applicable	CR1,3
46.	List major interest groups (i.e. primary/key stakeholders) that might want to be involved in the transboundary initiative or might be affected by it.	I
47.	Is there any international organization involved or foreseen to be involved in the transboundary initiative, and what is its role?	I
48.	Identify major roles of key stakeholders in the transboundary initiative.	I
49.	Identify those stakeholders that have decision-making power.	I
50.	a) Do any stakeholders apart from protected area management authority participate in protected area and/or resource management? 5–Yes; 1–None	S3
	b) If yes, indicate which stakeholders.	I
51.	Please assess the interests of primary stakeholders identified in question 46. 5–Similar; 3–Different but compatible; 1–Conflicting	S3,4
52.	a) Do any interests of stakeholders in potential transboundary initiative cut across the state boundary? 5–Yes, many; 3–Only some; 1–None	S3
	b) If yes, please identify these key interests.	I
53.	a) Could any stakeholder undermine the transboundary process or outcome? 1–Yes; 3–Potentially; 5–No	S4
	b) If yes, please indicate who.	I
54.	Do you support the transboundary initiative development? 5–Yes, significantly; 3–To some extent; 1–Not at all	S4
55.	Would key stakeholders benefit from transboundary cooperation? 5–Yes, majority; 3–Only some; 1–None	S3,4

56.	Would any stakeholders be disadvantaged by transboundary cooperation? 1–Yes; 5–None	S4
57.	Have any of the key stakeholders already engaged in some form of cooperation with parties across the state boundary? 5–Yes, successfully; 3–Yes, but with difficulty; 1–No	S3
58.	a) Are there any potential benefits for the local communities to raise their support for establishing a TBPA? 5–Yes; 1–No	S3
	b) Please indicate them.	I
59.	Which administrative jurisdictions are foreseen to be involved in the transboundary initiative?	I
60.	Would administrative jurisdictions involved in the TBPA hinder the transboundary initiative? 1–Yes, significantly; 3–To some extent; 5–Not at all	G4
61.	Are there any settlements located within the territory or adjacent to the proposed TBPA?	I
62.	Are there any unresolved claims to land areas or water bodies on either side of the present state border? 1–Yes; 5–No	G4
63.	Would transboundary cooperation allow freer circulation of the local population across the state border? 5–Yes, significantly; 3–To some extent; 1–Not at all	G3
64.	How developed is the transport infrastructure network between the protected areas in the proposed TBPA, including border crossings? 5–Well developed; 3–Somewhat developed; 1–Not very developed/Non-existent	G3,4
65.	Is there a visa regime that regulates the movement of people? 1–Yes; 5–No	G4
66.	Can transboundary cooperation help in the reunification of communities and/or families across the state border? 5–Yes; 1–No; N/A–Not applicable	G3
67.	Has there recently been a military or ethnic conflict or tension between the countries concerned that could negatively affect future cooperation? 1–Yes; 5–No; N/A–Not applicable	G4
68.	To what extent could transboundary cooperation mitigate any potential damages or adverse impacts of the past military and/or ethnic conflict to nature and/or the local population? 5–Significantly; 3–To some extent; 1–Not at all; N/A–Not applicable	G3
69.	Do you have available financial resources for transboundary related activities? 5–Yes, sufficient; 3–Limited, but enough to start; 1–None	C2,3,4
70.	Do you have people available for the coordination of transboundary related activities? 5–Yes, most of them; 3–Some, but enough to start; 1–None	C2,3,4
71.	Do the people available for the coordination of transboundary related activities have the relevant knowledge and skills (i.e. capacity)? 5–Yes, sufficient; 3–Limited, but enough to start; 1–Capacity development is highly needed	C2,3,4
72.	Are there any people with vision and ability to make it compelling to others? 5–Yes; 1–No	C2,3
73.	a) Do you have the facilities (e.g. telephone, internet access, meeting rooms) to manage regular and effective communication with partners in the proposed TBPA? 5–Yes, most of them; 3–Some, but enough to start; 1–None	C2,3,4
	b) Please list the facilities that you have available.	I
74.	Are you willing to share any potential resources with your partners? 5–Yes; 1–No	C3,4

75.	a) Can operational and/or technical capacities be improved by mutual assistance? 5–Yes; 3–To some extent; 1–No	C3
	b) Please list those capacities that you could provide to your partner in a neighbouring country (1), as well as those that you would benefit from in mutual cooperation (2).	I
76.	a) Is there a need for assistance in financial resources and/or equipment and/or knowledge development from external sources? 5–No need; 3–Some need; 1–Yes, significant need	C2,3,4
	b) Please list the needed resources.	I
77.	Would a financial contribution for transboundary cooperation activities be available from the state budget? 5–Yes; 3–Potentially; 1–No	C3,4
78.	Would financial support be accessible from the local municipal/community budgets or the private business sector? 5–Yes; 3–Potentially; 1–No	C3
79.	Can partners across the state boundary understand each other's language(s) or effectively communicate in a mutually understood language? 5–Yes, completely; 3–Yes, well enough; 1–Not at all	C2,3,4
80.	How different are institutional, operational and technical capacities between partners on each side of the state border? 1–Significantly different; 3–Somewhat different; 5–Not different	C3,4
81.	Are any sources of information (e.g. biodiversity inventories, maps, databases) available for planning the proposed TBPA? 5–Yes, most of them; 3–Enough to start planning the TBPA; 1–None	C2,3,4
82.	To what extent is the available information from question 81 compatible in the involved countries? 1–Significantly different; 3–Different to some extent; 5–Not different	C3,4
83.	Do legal provisions for data exchange exist between partners (e.g. nature conservation authorities, protected area administrations, local authorities, scientific institutions) on each side of the state border? 5–Yes; 3–To some extent; 1–None	C3,4
84.	To what extent is the state of knowledge on biodiversity and natural resources of the proposed TBPA different in each country? 1–Significantly different; 3–Different to some extent; 5–Not different	C3,4
85.	To what extent do methodologies for data collection and management differ in involved countries? 1–Significantly different; 3–Different to some extent; 5–Not different	C3,4
86.	Could any common initiatives aimed at improving the state of knowledge on biodiversity and natural resources of the proposed TBPA be jointly undertaken in the course of transboundary cooperation? 5–Yes; 1–No	C3
87.	Would you benefit from scientific cooperation across the boundary? 5–Yes, significantly; 3–To some extent; 1–Not at all	C3
88.	Have any common transboundary research activities been implemented? 5–Yes, successfully implemented; 3–Yes, but implemented with difficulty; 1–None	C3
89.	Do any potential partners have previous experience in managing externally funded projects? 5–Yes; 1–No	C2,3
90.	Who could assist in increasing capacities on transboundary cooperation?	I
91.	Who could assist in identifying sources of funds and assistance for transboundary activities?	I

Evaluation and interpretation of results

Each question in the questionnaire marked with 'CR', 'S', 'G', 'C' in the right column of the table carries a number of points. Points are indicated in the responses you make (e.g. if you circled 5–Yes, you obtained 5 points; if you circled 3–To some extent, you obtained 3 points; etc.).

Each question marked with 'CR', 'S', 'G', 'C' in the right column is also marked with numbers from 1 to 4. These numbers denote a particular assessment category (and should not be confused with the number of points):

- 1 - The need for TBC;
- 2 - Readiness of stakeholders to initiate TBC;
- 3 - Opportunities that could speed up the process and/or be generated by TBC; and
- 4 - Risks that could slow the process.

Some questions contain more than one assessment category, e.g. 3 and 4, or 2, 3 and 4, etc. When calculating the points, make sure to calculate those points of questions that are in the same assessment category; e.g. points for 'CR2' questions or points for 'S2' questions, etc. This will enable reaching the conclusions for each assessment category that is applicable to each of the four parts of the questionnaire:

- 'CR' - Compelling reason for transboundary conservation
- 'S' - Stakeholders
- 'G' - Geographic reach, regional stability and complexity
- 'C' - Capacity

'CR' assesses the need for TBC and provides the areas of opportunities and risks. 'S' assesses the opportunities and risks related to stakeholders' involvement in TBC. 'G' assesses the opportunities and risks related to geography and regional stability. 'C' assesses the readiness of stakeholders to engage in TBC process based on their capacity, as well as opportunities and risks related to the capacity.

Some questions contain a) questions that are scored, and b) questions that are informative ('I'). In such cases, use the answers to 'I' questions in your final report.

Evaluation and interpretation of results in each part is provided in the following section.

'CR' QUESTIONS: Compelling reason for transboundary conservation

THE NEED FOR TBC ('CR1')

Instructions and results

Sum up all points of 'CR1' marked questions = Result 1: _____
Count the number of 'CR1' marked questions that are NOT evaluated with 0 (zero) = Result 2: _____
Divide Result 1 with Result 2 = Total (overall need for TBC): _____

Do you have at least one 'CR1' question evaluated with 5 points? Yes / No

No.	Total (overall need for TBC) score	'Need for TBC' statements
1	need: 1.0–1.99, and without any 'CR1' question evaluated '5'	The idea of TBC should be reconsidered. There is a lack of compelling reasons in the following areas: _____ <i>(list the 'CR1' question area(s) evaluated with 1 point)</i>
2	need: 1.0–3.0, with at least one 'CR1' question evaluated '5'	There is a need for TBC, especially in the area(s): _____ <i>(list the 'CR1' question area(s) evaluated with 5 points)</i>
3	need: higher than 3.0	There is strong need for TBC in the following area(s): _____ <i>(list the 'CR1' question area(s) evaluated with 5 points)</i>

OPPORTUNITY ('CR3')

Instructions and results

List the 'CR3' questions evaluated with 5 points: _____

'Opportunity' statements

There are a number of opportunities, namely:

(list the 'CR3' question areas evaluated with 5 points)

RISK ('CR4')

Instructions and results

List the 'CR4' questions evaluated with 1 point: _____

'Risk' statements

There are a number of risks, namely:

(list the 'CR4' question areas evaluated with 1 point)

‘S’ QUESTIONS: Stakeholders	
OPPORTUNITY (‘S3’)	
Instructions and results	
List the ‘S3’ questions evaluated with 5 points: _____	
‘Opportunity’ statements	
There are a number of opportunities, namely: _____	
<i>(list the ‘S3’ question areas evaluated with 5 points)</i>	
RISK (‘S4’)	
Instructions and results	
List the ‘S4’ questions evaluated with 1 point: _____	
‘Risk’ statements	
There are a number of risks, namely: _____	
<i>(list the ‘S4’ question areas evaluated with 1 point)</i>	

‘G’ QUESTIONS: Geographic reach, regional stability and complexity	
OPPORTUNITY (‘G3’)	
Instructions and results	
List the ‘G3’ questions evaluated with 5 points: _____	
‘Opportunity’ statements	
There are a number of opportunities, namely: _____	
<i>(list the ‘G3’ question areas evaluated with 5 points)</i>	
RISK (‘G4’)	
Instructions and results	
List the ‘G4’ questions evaluated with 1 point: _____	
‘Risk’ statements	
There are a number of risks, namely: _____	
<i>(list the ‘G4’ question areas evaluated with 1 point)</i>	

'C' QUESTIONS: Capacity	
READINESS ('C2')	
Instructions and results	
List the 'C2' questions evaluated with 5 points: _____ List the 'C2' questions evaluated with 1 points: _____	
Results	'Readiness' statements
There are no 'C2' questions evaluated with 1 point.	Readiness of stakeholders to initiate TBC is good, especially in the area(s): _____ <i>(list the 'C2' question areas evaluated with 5 points, if any)</i>
All other cases.	Readiness of stakeholders to initiate TBC is good in the area(s): _____ <i>(list the 'C2' question areas evaluated with 5 points, if any)</i> but, particular attention should be given to improving the area(s): _____ <i>(list the 'C2' question areas evaluated with 1 point)</i>
OPPORTUNITY ('C3')	
Instructions and results	
List the 'C3' questions evaluated with 5 points: _____	
'Opportunity' statements	
There are a number of opportunities, namely: _____ <i>(list the 'C3' question areas evaluated with 5 points)</i>	
RISK ('C4')	
Instructions and results	
List the 'C4' questions evaluated with 1 point: _____	
'Risk' statements	
There are a number of risks, namely: _____ <i>(list the 'C4' question areas evaluated with 1 point)</i>	

Annex I: Example of a narrative report

REPORT

FEASIBILITY FOR TRANSBOUNDARY CONSERVATION INITIATIVE ESTABLISHMENT

Name of the potential Transboundary Protected Area:

Involved countries:

(1) 'CR' QUESTIONS: Compelling reason for transboundary conservation

There is strong need for TBC in the following areas (*list the reasons for TBC initiative establishment as per the results of the 'CR1' questions in the diagnostic tool*):

- ...
- ...
- ...
- ...

There are a number of opportunities that could speed up or be generated by the TB process, namely (*list the opportunities as per the results of the 'CR3' questions in the diagnostic tool*):

- ...
- ...
- ...
- ...

There are a number of risks that could slow the TB process, namely (*list the risks as per the results of the 'CR4' questions in the diagnostic tool*):

- ...
- ...
- ...
- ...

(2) 'S' QUESTIONS: Stakeholders

There are a number of opportunities that could speed up or be generated by the TB process, namely (*list the opportunities as per the results of the 'S3' questions in the diagnostic tool*):

- ...
- ...
- ...
- ...

There are a number of risks that could slow the TB process, namely (*list the risks as per the results of the 'S4' questions in the diagnostic tool*):

- ...
- ...
- ...
- ...

(3) 'G' QUESTIONS: Geographic reach, regional stability and complexity

There are a number of opportunities that could speed up or be generated by the TB process, namely *(list the opportunities as per the results of the 'G3' questions in the diagnostic tool)*:

- ...
- ...
- ...
- ...

There are a number of risks that could slow the TB process, namely *(list the risks as per the results of the 'G4' questions in the diagnostic tool)*:

- ...
- ...
- ...
- ...

(4) 'C' QUESTIONS: Capacity

Readiness of stakeholders to initiate TBC is good, especially in the areas *(list the capacity needs as per the results of the 'C2' questions in the diagnostic tool)*:

- ...
- ...
- ...
- ...

There are a number of opportunities that could speed up or be generated by the TB process, namely *(list the opportunities as per the results of the 'C3' questions in the diagnostic tool)*:

- ...
- ...
- ...
- ...

There are a number of risks that could slow the TB process, namely *(list the risks as per the results of the 'C4' questions in the diagnostic tool)*:

- ...
- ...
- ...
- ...

Annex II: Examples of potential fields and benefits of transboundary cooperation

Fields of cooperation	Examples of possible common actions	Examples of potential benefits
Information and data exchange	Exchange of information on natural and cultural values	<ul style="list-style-type: none"> developed common inventories developed common strategies and planning common transboundary actions common identity building
	Exchange of information on common threats to environment and/or nature	<ul style="list-style-type: none"> enhanced prevention of natural hazards and man-made threats to environment and/or nature
	Exchange of information on tourism	<ul style="list-style-type: none"> monitoring visitor traffic and its seasonality research on main visitor destinations development of a common sustainable tourism development strategy at the regional scale
	Establishing the common GIS database for the entire transboundary area	<ul style="list-style-type: none"> common planning and monitoring of conservation activities
	Organisation of joint events	<ul style="list-style-type: none"> improved information flow sharing results of scientific research
Research	Establishing common resource centres and transboundary 'think-tanks'	<ul style="list-style-type: none"> increased, cumulated pool of expertise elaboration of common approaches to common challenges and management issues
	Implementing joint scientific projects and programmes	<ul style="list-style-type: none"> elimination of potential duplication of efforts exchange of research methodologies and technical skills
	Standardisation of research and monitoring methodology	<ul style="list-style-type: none"> compatibility of data collection, processing and management methods comparability of research results
Management planning	Cooperation on developing management plans for particular protected areas involved, and for the entire transboundary area	<ul style="list-style-type: none"> provides protected area managers, planners and scientists with a more holistic and wider ecoregional approach harmonisation of management plans at the TBPA scale developed common vision of the future TBPA developed common strategies and planning common transboundary actions
	Cooperation on developing spatial management/land development plans	<ul style="list-style-type: none"> harmonised and/or coordinated spatial management/land development plans at the TBPA scale allows joint opposition against unwelcome development
	Establishing joint thematic working groups	<ul style="list-style-type: none"> cumulating the skills pool, finding relevant expertise and solutions for either common or exclusive single-side management problems
	Developing the common environmental monitoring system	<ul style="list-style-type: none"> evaluation of the effectiveness of joint or harmonized management of the TBPA evaluation of the 'added value' of transboundary cooperation

Cooperation on protection of the common natural and cultural heritage	Coordination of protective measures concerning threatened, protected and migratory species as well as rare habitats and endangered ecosystems	<ul style="list-style-type: none"> coordinated ecosystem-based management for plant and animal species where populations occur on both sides of the state boundary, or for migratory wildlife species that cross state border(s) implementation of coordinated protective measures reduced risk of biodiversity loss
	Exchange of specimens of animal or plant species, establishing common ex-situ seed/ gene banks and/or nurseries of rare and threatened species, transfer of specimens for ex-situ restoration	<ul style="list-style-type: none"> protection or restoration of animal or plant species that are threatened or extinct in one national area but still viable across the border reduced risk of biodiversity loss prevented negative inbreeding effects in isolated wildlife populations reintroduced wildlife species requiring a large habitat range, such as large carnivores or birds of prey sharing and reducing the costs of reintroduction activities
	Coordinated protection and restoration of ecological corridors	<ul style="list-style-type: none"> wildlife and plant species migrations across the state border coordinated ecosystem-based management for species where populations occur on each side of the state border or for migratory wildlife species that cross state border(s)
	Joint patrolling and surveillance of border area, sharing of the intelligence database and law enforcement methods	<ul style="list-style-type: none"> enhanced law enforcement, better control of poaching and illegal trade in plants and animals better control of wildfire
	Implementing common control measures on invasive species	<ul style="list-style-type: none"> control, and where required, eradication of pest species (pathogens, insect pests or invasive alien species)
	Implementing common projects on the protection of historical and cultural heritage	<ul style="list-style-type: none"> technical skills, experience, and knowledge exchange
Capacity building for protected area authorities	Joint staff training, staff exchange and secondment programmes	<ul style="list-style-type: none"> personnel capacity development experience exchange, e.g. in law enforcement, protected area management, fundraising and project management, environmental education
	Sharing expensive research or heavy technical equipment	<ul style="list-style-type: none"> reduced operational costs technical skills exchange
	Direct technical assistance	<ul style="list-style-type: none"> enhanced operational capacity building

Sustainable tourism development and shared visitor management	Preparation of the common sustainable tourism development strategy	<ul style="list-style-type: none"> • harmonised development of tourist facilities throughout the TBPA • enhanced common visitor 'code of conduct' • enforced compatible visitor access regulations • provides for streamlining the flow of visitors according to the common strategy for the entire area • building the common identity of the TBPA region
	Development of joint tourism services	<ul style="list-style-type: none"> • greater marketing strength of the TBPA • improved quality of tourism services • attracts tour operators due to the economy of scale and more diversified and broader tourist product package available • higher tourist attractiveness
	Organising joint training of tourist guides and interpretative personnel	<ul style="list-style-type: none"> • experience and interpretative skills exchange • better knowledge of the TBPA region • better communication and understanding between partners • building the common identity of the TBPA region
	Joint marketing and promotion of tourism potential	<ul style="list-style-type: none"> • greater marketing strength of the TBPA • increased income of the local tourism service and accommodation providers
	Common labelling, marketing and promotion of local agricultural products and handicrafts	<ul style="list-style-type: none"> • increased income of local farmers and craftsmen • contribution to protection of traditional knowledge and cultural heritage • developed common regional products
Cross-cultural management and common identity building	Establishing cultural links that promote regional identity, promoting joint cross-cultural events and cultural exchange	<ul style="list-style-type: none"> • enhanced protection of the common historical and cultural heritage • better understanding of the neighbour's culture and traditions
	Developing a common transboundary logo	<ul style="list-style-type: none"> • increased marketing strength of the whole TBPA region • building the common identity
	Organisation of neighbour's language training courses	<ul style="list-style-type: none"> • improved communication between partners

Public relations, communication, and awareness raising	Providing assistance to the neighbouring protected areas in acquiring international designations (e.g. Biosphere Reserve, World Heritage Site)	<ul style="list-style-type: none"> • improved international recognition of the TBPA region • increased marketing strength of the whole TBPA region • increased credibility of common fundraising initiatives
	Development of the common communication strategy	<ul style="list-style-type: none"> • better understanding of shared natural and cultural values, and of the added value of transboundary cooperation • building the common identity of the TBPA region
	Developing common communication tools (e.g. maps, brochures, publications, website)	<ul style="list-style-type: none"> • improved information, communication and experience exchange between partners • improved international recognition of the whole TBPA region • reduced operational costs • increased credibility of common fundraising initiatives
	Publishing information materials in all national languages and unifying the design of materials	<ul style="list-style-type: none"> • better knowledge of the whole TBPA region • improved communication between partners • increased 'corporate identity' of the TBPA
	Organisation of field staff meetings from neighbouring areas across the border	<ul style="list-style-type: none"> • improved protected area staff morale • improved working contacts in border areas and reduced feeling of isolation in remote locations • helps to overcome cross-cultural differences
	Cooperation in environmental education programmes, organisation of youth exchanges and joint volunteer camps	<ul style="list-style-type: none"> • experience and interpretative skills exchange • better knowledge of the whole TBPA region, as well as understanding of the added value of transboundary cooperation • promotes better understanding of neighbour's culture and traditions
Funding	Developing joint project proposals	<ul style="list-style-type: none"> • greater lobbying strength for fundraising efforts and attracting international donors and assistance agencies • greater responsibility to honour obligations for support among external founders, decision-makers, authorities and governmental agencies
	Establishing common funding mechanisms for transboundary cooperation	<ul style="list-style-type: none"> • continuity of transboundary cooperation activities • covering core costs of transboundary cooperation • provides greater lobbying strength for fundraising efforts • provides matching funds/own contribution required when applying for external project funding



Case studies 4

4.1

Why transboundary conservation in the Dinaric Arc?

*Boris Erg*²⁴

The Dinaric Arc is a region in South-Eastern Europe stretching from the Alps, covering large areas of Slovenia, Croatia, Bosnia and Herzegovina and Montenegro and reaching the north of Albania. It encompasses the Eastern Adriatic Sea from Italy to Albania. The Dinaric Karst is regarded as one of the most representative karst regions in the world. The large mountain chain Dinarides (often referred to as the Dinaric Arc) was named after one of the most prominent mountains in the Dinaric Arc region—the centrally positioned Mount Dinara straddling the border of Bosnia and Herzegovina and Croatia. Due to its size, geology and climate, the region is home to a range of habitats including alpine meadows, karst fields, large natural and semi-natural forests, and is the most water-rich area in the Mediterranean in terms of freshwater ecosystems. The Dinaric Arc hosts a magnitude of species and is characterized by an exceptionally high rate of endemism. There is a vast range of species that occur across the region. It is widely recognized for the diversity of plants, large carnivores and subterranean fauna, all with high biodiversity conservation importance. The region's biodiversity is also important for securing numerous ecosystem services that provide livelihoods for local communities and support national economies. Given its exceptional biodiversity, it comes as no surprise that numerous protected areas have been designated across the region. Apart from protected areas designated at the national level, such as nature reserves, national parks, nature parks, protected landscapes, etc., some areas have also been recognized at the international level, including several Ramsar sites, Biosphere Reserves and three natural World Heritage properties. Apart from the diversity of natural resources, the region became known for its rich ethnic tradition and cultural heritage. Particular socioeconomic fabrics have been developed over time. Due to the geographical characteristics of the region, and in particular because of its recent political history characterized by the creation of numerous sovereign countries, the entire region became intersected by many national borders, significantly increasing the quantity of shared resources and protected areas situated along the national borders. It has put the Dinaric Arc at the very centre of international conservation attention, prompting the need for transboundary conservation initiatives in response to the divided natural resources and multiplied administrative jurisdictions.

The following chapter provides a series of case studies as a detailed insight into collaborative endeavours on creating regional nature conservation platforms in the Dinaric Arc and, in particular, on activities undertaken to foster transboundary conservation in selected pilot sites in the Environment for People in the Dinaric Arc project. The objective of these efforts was to strengthen transboundary cooperation at the regional level and to bring transboundary conservation theory down to practice. This has been made possible in part by focusing on direct conservation action on the ground, and partly by means of mobilizing decision makers and local communities and making them aware of the benefits of collaborative cooperation across national borders. The presented case studies are meant to provide a brief history of regional cooperation in the Dinaric Arc and TBC efforts in the selected sites, and to share lessons learned and perspectives for transboundary conservation. Even though stemming from the specific context of the Dinaric Arc region, many of the guidelines and advice given in Chapters 3 and 4 can be found and traced in the selected case studies, proving the universal nature of transboundary conservation and its replication potential. Apart from the undertakings made in the frame of the Environment for People in the Dinaric Arc project, the presented case studies have tried to capture the essence of other efforts on TBC relevant for the selected sites, as well as those on creating a regional cooperation framework for nature conservation in the region in order to provide a full picture on the state and perspective of TBC in the Dinaric Arc. We hope that the two main components of this publication, the TBC background and guidelines and the case studies, are fully complementary and will help to underline the challenges and opportunities faced by both researchers and practitioners in their pursuit of transboundary conservation.

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Figure 1: Position of the Dinaric Arc in South-East Europe

* For the purpose of this publication, the name Kosovo has been used to refer to the territory under the United Nations Interim Administration Mission in Kosovo, established in 1999 by UN Security Council Resolution 1244.

4.2 Lessons from the Western Balkans on initiating transboundary collaboration through a high-level regional political agreement

Deni Porej²⁵



Background

The biodiversity of the Western Balkans was under pressure during the series of conflicts that followed the collapse of Yugoslavia. Since then, reconstruction and rehabilitation have been the main common characteristics, with EU accession and re-establishment of regional cooperation among the political imperatives for the region.

For many reasons, protected areas (PA) offered a suitable platform for achieving conservation, political and sustainable development objectives. First, protected areas are often in the least developed and poorest of regions, far from political and economic centres. As such, beyond just protecting biodiversity, protected areas are seen as the most promising vehicle for local economic development. Second, since high mountain ranges and rivers make good natural boundaries, many protected areas are located in the bordering regions that experienced the greatest war-time impacts. Finally, the staff working in protected areas throughout the region share similar natural environment, opportunities and challenges. They see the clear need and advantages in working together and are among the first to take regional cooperation into their own hands.

Activities and results

In 2008, a group of organisations, networked through the Dinaric Arc Initiative (IUCN, WWF, UNESCO, UNDP, Council of Europe, FAO, UNEP, SNV and EuroNatur), supported national governments in reaching a high-level regional collaboration agreement on protected areas. This agreement was reached under the auspices of the CBD Programme of Work on Protected Areas at the 9th Conference of the Parties (COP 9) in Bonn, Germany.

This paper briefly presents some of the key achievements and lessons learned from this process. Some of the key outcomes of this process included:

1. A major political commitment for joint work on PAs between six countries in the region through the “Big Win Joint Statement”, signed by ministries responsible for the environment from Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Montenegro and Albania.

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2. 80% of the “Big Win” commitments were implemented including:
 - almost 130,000 hectares protected and 14 new PAs or PA extensions underway;
 - PA management effectiveness assessed in all six countries;
 - agreements signed for four transboundary PAs, several others under development;
 - 27 management plans finalised and ten more underway;
 - over CHF 3.50 million raised to support Big Win implementation.
3. Personal and professional relationships were established between major stakeholders in the region, resulting in more open dialogue, collaboration and development of numerous follow-up projects.
4. New regional agreements, building on the “Big Win” were created (Dinaric Arc Protected Area Network) or are under development (Dinaric Arc Convention).

Lessons learned

The right place, the right time and the right idea

It is important to underline that these achievements were made possible by a number of contributing factors coming together at the same time—most importantly a genuine desire to foster regional collaboration by the countries involved. It is of critical importance that global conservation organizations recognize these opportunities and take decisive action.

Develop a strong, credible advocacy support partnership between recognized organizations active in the region

Effective advocacy for a regional political commitment would not have been possible without the joint effort of all Dinaric Arc Initiative (DAI) partners. Inviting governments to participate in a political commitment supported by a number of recognized organisations working in the region increases the chances of success. All communication towards governments in the preparation (advocacy) phase must be joint—it takes time to align all the views of all supporting organisations, but it is definitely worth the effort. It is reasonable to expect that the supporting organisations’ interest and capacity to support the development of the commitment may vary over the time necessary to achieve the commitment. Therefore, it is important to have a lead organisation in the partnership that can guarantee ‘staying power’ through the provision of dedicated core manpower, basic resources and determination to see the entire process through. One should not underestimate the time and effort necessary, and having high-quality, dedicated staff is a necessary component of success.

Identify and support a strong political leader

At the time, Slovenia was the only EU country of the region. Slovenia also held the European Union Presidency and had a strong interest in providing a leadership role in developing regional collaboration. These circumstances, coupled with the perception of regional stakeholders that Slovenians were relatively politically “neutral”, made Slovenia an ideal choice to champion the effort. Initial high-level inter-governmental communication on the idea of the regional commitment was carried out by the Slovenian government (with support of DAI partners). Invitations to the official ministerial signing of the “Big Win” at the CBD COP 9 in Bonn, and the event itself, were also organized under the auspices of Slovenian government.

Develop general regional commitments and specific national commitments

The Dinaric Arc “Big Win” commitments had two components: the Joint Statement (regional) and six national commitments. It is important to distinguish between the two. Regional commitments are more general in formulation and they use positive language that all countries can agree to. While not being measurable, they nevertheless serve two very important purposes: a) creating a positive platform for ‘early wins’ in initial negotiations between countries and b) providing a political framework for further collaboration on issues not necessarily specified in the national commitments at the time of signing.

Joint statement of the representatives of the Governments of the Republic of Albania, Bosnia and Herzegovina, the Republic of Croatia, Montenegro, the Republic of Serbia, and the Republic of Slovenia

As the Parties to the Convention on Biological Diversity (CBD), the Governments of the above listed countries recognize that a joint and coordinated effort is needed in efficient delivery of the Programme of Work on Protected Areas obligations. Transboundary cooperation between the Dinaric Arc countries in the implementation of the Programme of Work on Protected Areas, with the aim to create a well managed, and ecologically representative protected area network, is the key to safeguard the Dinaric Arc ecoregion’s exceptional natural and cultural values.

We, the representatives of the Governments:

Recognize the specific natural and cultural values of the Dinaric Arc ecoregion and acknowledge the CBD Programme of Work on Protected Areas to be a valuable framework for conserving biological diversity and generating benefits to local and national economies.

1. Aim to further continue our activities towards implementation of national priorities leading to delivering on the objectives of the CBD Programme of Work on Protected Areas.
2. Support increased understanding of the relationship between the CBD Programme of Work on Protected Areas and the EU legislation on nature conservation.
3. Encourage mutual cooperation and exchange of experiences in protected areas management on the regional level.
4. Recognize the importance of regional cooperation to achieve transboundary sustainable management of the South-Eastern European region, including the Adriatic Sea, Dinaric Alps and Sava River Basin.
5. Recognize and support the need for sustainable use of water resources and protection of groundwater-dependent ecosystems by introducing sustainable integrated management principles in the Dinaric karst system.
6. Encourage the preservation of the cultural heritage of the Dinaric Arc through support for traditional activities in protected areas which contribute to biodiversity conservation and local livelihoods.
7. Call upon the Dinaric Arc Initiative partners (WWF, UNESCO BRESCE, IUCN, UNDP, Council of Europe, FAO, SNV, UNEP, Euronatur) and other interested parties to strengthen their cooperation with the Dinaric Arc countries and facilitate necessary support in the delivery of the national priorities.
8. Support evaluation of the contribution of protected areas to each country’s economy and for the region as a whole.

On the other hand, national commitments need to be formulated as measurable objectives. These can include the establishment of new protected areas, development of management plans, assessments of PA management effectiveness, development of specific policies, etc. Several points bear special mention:

1. National commitments can be composed of different types of objectives:
 - Objectives that would most likely be delivered as part of the ongoing projects and activities (e.g., final proclamation of a new national PA for which all prerequisites have already been met). These are important as they create ‘early wins’ and build confidence that other commitments can also be delivered.
 - Objectives that require additional technical and financial support for their implementation (e.g., development of the Natura 2000 database). These objects help focus attention and efforts of national institutions, donors and supporting organizations on key national priorities.
 - Objectives that would not have been national commitments if it were not for the other countries listing them as their priorities. In our case, an example would be an agreement to carry out PA management effectiveness assessments. Only one country suggested this objective among their national commitments at the onset. Through the negotiation process, other countries have learned more about the benefits of doing this, and gladly included the assessments in their national priorities. This is an opportunity for supporting organisations to encourage institutions to introduce new methodologies and approaches at national levels.
2. The number, scope and ambition of objectives will initially vary from country to country, and some may struggle in identifying priorities. Very valuable parts of this process are consultations and ‘peer review’ of each other’s national commitments prior to signing. Through this process, national authorities learn about developments in other countries, and this helps them in developing their own priorities. Be prepared for much shuttle-diplomacy at this stage of the process—it is well worth the effort.
3. National commitments may prove to be international. Such was a case with national commitments to foster collaboration with specific PAs from other countries. Eight transboundary regions were mutually highlighted by governments as priorities for establishing cooperation—some of those regions already had PAs, while in others PAs are yet to be established. These commitments directly led to the development of an IUCN/SNV/WWF project to support concrete actions on the ground in five of those areas.

What “Big Win” is not

Contrary to some other international agreements of this kind, there was no major source of funding dedicated to supporting the delivery of commitments. It is up to governments and DAI partners to do so by developing individual projects and engaging donors.

The Dinaric Arc “Big Win” is not a legally binding document. We have chosen to use the regional agreement as a source of inspiration, a catalyst for action, rather than a point for criticism on whether or not governments were fully committed to the delivery of each of the commitments.

All government signatories of “Big Win” have since moved to other positions, and it is an ongoing task for DAI partners to maintain political will for the future implementation of the remaining commitments. Five years since the signing, with 80% of the commitments delivered, we have good reason to start working on a new, even more ambitious regional commitment.

4.3 Plitvice Lakes National Park and Una National Park

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Una National Park, BiH © Zeljko Mirković-Grga

Area description

The Plitvice Lakes and Una National Parks are situated about 40 km apart in the Republic of Croatia and Bosnia and Herzegovina (BiH), respectively. An area of 19,800 ha along the upper course of the Una River forms the main part of Una National Park (NP). Plitvice Lakes NP is situated in a forested karst area of almost 30,000 ha, northwest of Una NP. There is no physical connection between the two parks and the current focus of transboundary cooperation refers mainly to the territories of the parks with little attention on the area in between. The transboundary area is some 150 km south of Zagreb and approximately 60 km from the coastline, defining the climate as transitional between coastal and continental.

The dynamic interactions between hydrological and biological processes taking place on the specific geomorphological foundation have resulted in a unique but fragile phenomenon shaping the landscape of the Plitvice Lakes and Una NPs. The continuous creation of various karst forms, such as phytogenic travertine and tufa resulting from the deposition of insoluble calcium carbonate on mosses and algae, constantly changes the route of the water through small lakes, underwater caves, islands and waterfalls, rapids and channels.

There are 16 lakes in the Plitvice system connected by a series of streams and waterfalls along a distance of more than 8 km. The highest waterfall, 76 m high, is at the end of Novakovića brod, the last lake in the series. The most remarkable waterfalls on the Una River are Martin Brod, reaching 55 m in height, and Una's second largest waterfall Štrbački buk, at 25 m high.

Although water is considered the most prominent feature of the area, the diverse landscape contains a mosaic of habitats, including pastures, meadows and high-quality forests, intersected by deep canyons with steep cliffs. Forests play a vital role for the preservation of the entire area. They form a protective belt around the lakes and along the rivers, regulate climate and the hydrological regime, and shelter the diverse flora and fauna within. In 1965, a preserved primeval forest of beech and fir (*Abieti-Fagetum dinaricum*) covering an area of 80 ha, was declared as the Čorkova Uvala Special Reserve within Plitvice Lakes NP.

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The specific conditions of the transboundary area, including its karst relief, the mixture of continental, marine and mountainous climate, geological history, etc., have led to the development of specific vegetation of the area, with a strong endemic and relic element. In the relatively small area of Plitvice Lakes NP, a total of 1,267 plant species have been recorded, of which 72 are endemic. The rich plant diversity of Una NP is estimated at 1,900 plant species, though detailed information about Una's biodiversity did not exist at the time of preparation of this current case study. To date, 60 species of mammals and 160 species of birds have been recorded for each park.

The entire area was severely affected by the conflicts in the 1990s and the hardship of post-war transition challenges, and experiences continuous depopulation. Today, the socioeconomic situation differs significantly on the two sides of the border. The most recovered and fastest developing is the area of the Plitvice Lakes municipality, a consequence of the blooming tourism industry based on the natural attractions and fame of the national park. Unlike the rest of the area, which is relatively poor with a high unemployment rate and high percentage of elderly people, the Plitvice Lakes municipality has a higher standard of living thanks in part to the employment opportunities offered by Plitvice Lakes NP. The park permanently or temporarily employs 1,000 people engaged mainly in three hotels and a camp owned and managed by the park. Private accommodations are also available around the park but not well promoted to park visitors. Visitors to Plitvice Lakes NP have increased to over 1 million per year in the past two years. With an entrance fee of 15 euro per person, the park manages to maintain its staff and activities with very small contributions from the state budget. Currently, new regulations are being prepared in Croatia to allow for more equal distribution of revenue among protected areas. Thus, parks that do not enjoy such great popularity but are no less important for biodiversity would also benefit from the income generated from the more frequently visited parks.

Since most of the economic branches collapsed during the war, the local population is mainly engaged in tourism, forestry and low intensity farming. On both sides of the border, there are great expectations that tourism will increase the market value of the area and thus will improve the people's livelihood.

The history of nature conservation

The first legal protection of the Plitvice Lakes was realized for a short period in 1928/29 which lasted for only two years due to administrative issues. Only after World War II, in 1949, was Plitvice Lakes declared a national park, as Croatia's first. Thirty years later, it was inscribed in UNESCO's World Heritage List.

In Croatia, the Ministry of Culture was the main authority in charge of nature protection, pursuant to the Nature Protection Act passed in October 2003. Since 2012, the competent authority has been the Ministry of Environmental and Nature Protection. The State Institute for Nature Protection of Croatia is the central institution responsible for specialized nature protection activities and represents an expert unit for nature protection in Croatia. It is responsible for collecting and processing data that constitutes the background for nature protection design and planning.

The Public Institution of Plitvice Lakes NP with its bodies, the Governing Board, Director General and Conservation Manager, is the management authority of the park. The Director General is appointed by the Minister for a four-year mandate. Plitvice Lakes National Park has a management plan adopted in 2007 for a ten-year period that is aligned with the physical plans of the area and other documents such as strategies, action plans, etc. at the national and local levels.

The public company Una National Park was proclaimed by the Parliament of the entity Federation BiH (FBiH) by the Act on Una National Park passed on 29 May 2008. By virtue of this decree, the Public Company Una NP was established to manage the area. The story of the establishment of Una National Park is more recent than that of Plitvice Lakes NP. In 1991, the symposium "Value of the natural and cultural heritage of the Una River basin" triggered the initiative. Eventually, in 2002 the process of establishing Una NP was initiated, first with the preparation of a feasibility study in 2005, followed by

adoption of the Act on the Proclamation of Una NP in 2008. Appointing the Institution's director took about three years, during which period there was no operational management of the national park. The management plan for Una NP was recently adopted by the Government of the FBiH, and the document will be used as a guideline for the preparation of plans of work for the park.

The highest authorities in charge of the management, including sustainable development and conservation of this area, are the Federal Ministry of Environment and Tourism and the parliament of the entity FBiH. However, there is no state ministry at the federal level that is responsible for environmental issues, which poses an obstacle to the implementation of international treaties. Due to the division of the country into two entities—FBiH and Republika Srpska—the institutional framework and the framework for nature conservation remain relatively complicated. Each unit has its own government and ministries, including the ministry of environment and physical planning, and they all operate at three different levels (municipality, canton and entity), often without interaction and legal hierarchy.

Both Croatia and BiH are currently aspiring towards European Union membership. This would eventually lead to better synchronization of legislation on nature conservation between the two countries. Croatia is expected to join the EU on 1 July 2013 and has already made the necessary transpositions and alignments with EU legal acts, while BiH is much behind in this process. Moreover, BiH remains in a political standstill due to the complicated administrative structure of the country.

Transboundary conservation efforts

The first more focused efforts on transboundary conservation were made through the implementation of the EU CARDS 2004 project "Promoting conservation of border river ecosystems and sustainable use of resources in the border area of Croatia and Bosnia and Herzegovina". In the course of that project, activities led to the proposal of an action plan for conservation of the upper course of the Una River.

Prior to the appointment of the management administration of Public Company Una NP, joint actions in the area of Plitvice Lakes and Una NPs were based mainly on the mutual interests of regional and local authorities (counties, cantons and municipalities), not necessarily in the field of nature conservation. One example of this is the information desk of the Bihać municipality that was opened within one of the visitor centres of Plitvice Lakes NP during the high season that informs visitors in Croatia about the potential for tourism on the other side of the border. The recently implemented EU IPA CBC project "Una – Spring of Life" is another example of transboundary cooperation trying to boost tourism development. It built on the implementation of the EU CARDS 2004 project "UnAvanTurizam" that was aimed at supporting the sustainable development of areas along the Una River through cross-border cooperation and increasing institutional capacity for cross-border development. "Una – Spring of Life" covered the spring of the Una River in Croatia and the Una waterfalls in Bosnia and Herzegovina as parts of the same environment. The purpose of the project was to contribute to the creation of a common economic space in Croatia and Bosnia and Herzegovina through development of a joint tourism offer. The project also covered the preparation of the "Strategy for the development of tourism in the cross-border region of the upper course of the Una River".

Since the appointment of the director of Public Company Una NP and the start of activities of the Environment for People in the Dinaric Arc project, more intensive dialogue has been established for building a coherent joint vision for future cooperation in the field of nature conservation between the parks. The project reiterated the conservation aspect of the cooperation that was often overwhelmed by the urgent need of economic development of the area. The cooperation initiative spurred by the project team received more active support from the BiH side, while the managers of Plitvice Lakes NP were very open to cooperation, but without taking steps on their own. This can be explained due to the self-sufficiency and financial independence achieved by Plitvice Lakes NP and the ample resources generated by tourism compared to Una NP, which is still struggling to promote its tourism potential. Development of cooperation in the direction of local economic growth was obviously pursued by Una NP more than cooperation for conservation of biodiversity.

In these circumstances and in the lack of a management body of Una NP, the Centre for promotion of local development in Bihać (PLOD) took an active role in all stages of the dialogue between the parks initiated during the implementation of the project Environment for People in the Dinaric Arc. PLOD was established to contribute to faster and more effective economic growth and creation of a better business environment in cooperation with the municipalities of the Una-Sana Canton, NGOs, private sectors and public companies, including Una NP. For example, in cooperation with the Bihać Municipality, PLOD is implementing a project for the development of the Una National Park eco-zone and enrichment of its tourism offer. The goal of the project is to contribute to the development of tourism by creating a recognizable Una NP tourism offer by improving tourism infrastructure, developing the tourism services of Una NP, and promoting the Una NP tourism product. The centre therefore compensated to some extent for the lack of a functioning management structure of Una NP though it lacks the competence on nature conservation issues and can only cover particular fields related to sustainable economic growth.

The emphasis on local economic development based on the nature values of Una NP can benefit local people and nature if carefully implemented, though it can represent a negative outcome of TB cooperation if Una NP tries simply to copy tourism development from Plitvice Lakes NP without considering the local circumstances and making nature conservation its top priority.

In order to exchange views and establish an efficient mechanism for cooperation for nature conservation, a stakeholder meeting was organized in July 2011 by the Environment for People in the Dinaric Arc project. The purpose of the meeting was to facilitate the building of a joint vision and drafting a cooperation agreement between the two parks. Stakeholders on both sides were aware that cross-border cooperation is a foundation for future development and prosperity in almost all spheres and at any level of organization. The meeting was a place for the parks, local and county authorities, representatives of the respective ministries from Croatia and BiH and scientific institutions to devise the areas of cooperation, models and key players who would be the main carriers of the future cross-border cooperation. Other joint activities were also supported by the project, such as the organization of training on sustainable tourism held in Bihać, BiH, participation together with the two parks at the EKOBIS fair in Bihać, and publication of a promotional brochure for Una NP.

The joint vision developed during the stakeholder meeting and the following consultations led to the signing of an MoU between the parks for cooperation in the area of nature conservation. The preamble acknowledges that in both parks, water has a major role and represents one of most valuable assets of the area. Therefore the conservation focus is placed largely on the protection of the water bodies and currents that give special feature this area. Protecting water is however not possible without wider efforts to protect habitats and ecosystems. Therefore the three main fields of the MoU were outlined:

1. Protection and conservation of natural, cultural and historical values

The goal here is protection and preservation of the environment, ensuring the undisturbed continuation of natural processes, and protection and preservation of cultural and historical values of the region. Specific start-up activities outlined include mapping and preparation of a registry of natural of cultural values in Una NP according to the standards applied in the area of Plitvice Lakes NP.

2. Improvement of governance and institutional development

With the goal of ensuring a high quality management system, activities such as a needs analysis, preparation of programmes, organization of training focused on the transfer of knowledge and examples of good practice by Plitvice Lakes NP, and ensuring a functioning management body in the public company Una NP through education and the application of quality standards (ISO, PAN Park, etc.) were laid down.

3. Sustainable development of the entire region.

The goal of improvement of the quality of living of the local population through sustainable development can be achieved through careful identification of development goals and defining instruments of cooperation aimed at the improvement of overall development potentials, diminishing regional development inequalities and strengthening the competitive potential in

both the individual and joint offers, thus improving the quality of life of the local people in the region. The two NPs should ensure a coordinated approach to sustainable socioeconomic development through institutional cooperation, joint projects and the inclusion of all local stakeholders.

Conclusions

The Plitvice Lakes and Una NPs were the first national parks to be proclaimed in Croatia and the FBiH, respectively, though with a time difference of almost 60 years. The conservation history and experience gained by Plitvice Lakes NP is much more affluent than that of Una NP. Therefore Una NP sees its counterpart as a teacher in almost all fields of operation and also exhibits certain over-expectations in terms of reaching the same level of development and an improved standard of living of the local population in a short period of time. This might compromise its efforts of using the resources in a sustainable manner since proper development requires the capacity and knowledge of trained people, along with good infrastructure, and therefore it takes time and money to do it properly.

The MoU, although still a long way from full realization, was a key step in establishing the basis for cooperation. Specific activities giving tangible results on the ground can be added or removed depending on the changing circumstances and the funding available for their implementation, however, agreement on a long-term joined strategy and vision is a precondition for successful transboundary cooperation. In the meantime, regular communication for the exchange of information should be kept for more effective coordination and resources use.

Even though the MoU emphasizes nature conservation aspects, an immediate priority as seen by the signatory parties is the sustainable development of the region through economic activities such as tourism. The conservation context of transboundary cooperation is in the background and requires greater effort and dedication to ensure it is not neglected. More weight still needs to be given to joint management such as species action plans, research in areas such as potential green corridors, joint monitoring and education, as well as communication and alignment of conservation standards up to the top level.

4.4 Mount Dinara

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Mount Dinara, BiH/Croatia © Roman Ozimec

Area description

The Dinaric Arc is a region in South-Eastern Europe stretching from Trieste, Italy in the north to the mountains of Albania in the south, encompassing the Eastern Adriatic coast and a wide belt of the inland area. The common historical name for this region is Dinaric Karst, or simply Karst. The Dinaric Karst represents one of the most distinctive karst regions in the world, with a long history of scientific research on karst phenomena. Several basic terms have been introduced into the international terminology of karst phenomena to describe the specific features of the Dinarides, such as karst (karst), *polje* (field), *dolina* (sinkhole), *ponor* (swallow hole) and *uvala* (valley). The large mountain chain Dinaric Arc or Dinarides were named after Mount Dinara, as one of the most prominent mountains in the Dinaric Arc region. Extending over a length of 84 km, it is the second longest mountain in the Dinaric Arc after the Velebit Mountains. Its old Illyrian name was *Troura* or *Triget*, while its Latin name was *Adrian horos* or *Mons Ardio*. The current name is suspected to be derived from the name of the ancient Illyrian tribe Dindari that inhabited the eastern slopes of the mountain, but most likely it is according to the old Illyrian word *dindara*, meaning big mountain. Mt. Dinara is situated in the central part of the Dinaric Alps, some 220 km south of Zagreb, 140 km west of Sarajevo and 30 km from the Adriatic coast. As a natural border between south-eastern Croatia (Dalmatinska Zagora) and western Bosnia and Herzegovina (Zapadna Bosna), Dinara consists of four separate mountains: Ujilica, Dinara, Troglav and Kamešnica. With the exception of Ujilica, which is entirely in Bosnia and Herzegovina (BiH), the other three mountains are divided between the two countries. Its tallest peak Troglav (1913 m) is located in the territory of Bosnia and Herzegovina and the peak Dinara or Sinjal (1831 m) is Croatia's highest peak.

In Croatia, the upper course of the Cetina River and its adjacent karst polje or fields: Kninsko, Vrličko, Paško (formerly known as Cetinsko), Sinjsko, with the Koljansko and Hrvatačko fields are situated south-west of the mountain range. Across the border, in Bosnia and Herzegovina, Livanjsko Polje lies

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to the north-east of the mountain range, covering an area of 41,000 ha, making it the largest field in the Dinaric Karst, and the largest periodically flooded karst field in the world. It is situated at an altitude of about 700 m and has no surface water outflow, i.e. all the water drains through numerous sinks and a network of underground karst cavities towards the Cetina River in Croatia. This karst field is located completely in BiH, but represents a significant part of the Cetina River water catchment area. Together with the surrounding mountains (Mts. Kamešnica and Dinara in the south and Mts. Cincar, Staretina and Šator in the north and west), it forms a unique geomorphological and ecological entity. Livanjsko Polje contains an impressive network of surface and subsurface water bodies, including rivers, springs, lakes and oxbows. The holes in the field's floor that connect the underground relief with the surface are unique hydrological and hydrobiological phenomena, called estavele. Depending on groundwater levels, they act as springs in the wet season or sinkholes during the dry season. Livanjsko Polje is one of the rare fields in the Dinaric Arc where peat formation driven by carbonate particles, hard water and, in some cases, microorganisms is still ongoing.

Geologically, Mt. Dinara is formed by carbonate rocks, limestone and dolomites of Cretaceous and Jurassic age. Many karst phenomena are well developed, mainly karst fields and sinkholes, in addition to numerous caves. Some caves are protected as natural or geomorphological monuments, such as Mračna Pećina cave on Mt. Dinara and Duman cave near Livno. Surface water courses in the mountains are very rare because of karstification, and the water flows underground with many abundant springs at the foot of the southern slopes, at the contact points with lower Triassic or Neogene sediments. The Krka River and Cetina springs are the largest. Mt. Dinara is located exactly at the border of two climatic zones, Mediterranean and continental, with a submediterranean climate occurring on the southern slopes, continental on the northern slopes, and an alpine climate with bitter coldness and snow on highest parts of the mountain.

In the Croatian part of Mt. Dinara, 24 different habitats are recognised, of which more than 50% belong to different grassland habitats, mostly submediterranean and epimediterranean dry grasslands on shallow carbonate soils. Of these, 19 habitats are endangered according to the EU Habitats Directive. To date, 754 vascular plant taxa have been recorded on the Croatian part of the mountain, with 114 taxa listed as endangered in the "Red Book of Vascular Plants of Croatia".

Mt. Dinara has been a region of traditional migratory free range cattle breeding in the Dinarides over the past 2,000 years. According to historical data, more than 200,000 sheep were kept in some 600 *katuns* (mountain season domains) during the summer period. In 1934, more than 135,000 sheep were held in 500 *katuns* on the Dalmatian side of the mountain, and 15,000 sheep in 20 *katuns* on the Bosnian side. Thanks to traditional cattle breeding, grassland habitats are in excellent condition and cover more than 50% of the area, and are very rich in vascular plants and all associated biodiversity. The actual border between BiH and Croatia was in fact the border made by cattle breeders and established between the former Republic of Venice and Ottoman Empire in the 19th century.

Biodiversity

The Dinaric mountain range has extremely rich biodiversity at all levels: genes, species and ecosystems. It is especially rich in wetland species of vascular flora, including dozens of endemic and relict species. Livanjsko Polje in particular is an excellent example of a well preserved temperate grassland, a biome which, according to the United Nations List of Protected Areas, is underrepresented in the protected area systems worldwide (Chape et al., 2003). The flora of the BiH side of Mt. Dinara is very diverse and includes 315 taxa of vascular plants. Numerous plant species of the wider area of Livanjsko Polje have been listed on the IUCN red lists and as such were included in the proposal for the Red Book of Bosnia and Herzegovina (the proposal of the Red Book was prepared by Čedomir Šilić in 1996).

The vegetation is adapted to the habitats of high ground water levels and periodical floods. The largest wetlands of the karst fields are located in the northern part near Ždralovac. Wetland communities from the order *Tofieldietalia* and alliance *Caricion davallianae* cover only small areas in the flood zone in the south-west part of the field. Typical sedge and rush dominated fen communities (*Magnocaricion*) cover

a relatively small area along the streams. In the central part of the field, ash (*Fraxinus angustifolia* Vahl.) grows on sites usually flooded in early spring (Hayek, 1927-1933; Horvat et al., 1974). Communities of sticky alder (*Alnus glutinosa* L.) grow on wet soils in the relatively wide belt in the western part of the field. Remnants of woodland communities of English oak (*Quercus robur*) still can be found in the field. Both communities are one of the Natura 2000 vegetation types that also include forests of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*.

Apart from English oak, the forest communities include: hop hornbeam and pubescent oak (*Ostrya-Quercetum pubescentis*); Oriental hornbeam (*Carpinion orientalis* Bleč. et Lakušić.); pubescent oak and Oriental hornbeam (*Quercu-Carpinetum orientalis*); beech (*Fagetum montanum*) in the montane belt; mixed forests of fir and beech (*Abieti-Fagetum*); Autumn Moor Grass and beech (*Seslerio autumnalis-Fagetum*) and beech in the subalpine belt (*Fagetum subalpinum*) (Lakušić, 1970, 1975; Pieterse and Murphy, 1990; Riter-Studnička, 1954, 1955; Rodwell et al., 2002; Tutin, 1964-1985).

Previous study results indicated a very high level of avian diversity, with 204 observed bird species. Of these, 128 species nest in this region, and 12 are of European importance. The most important species are the Common Crane (*Grus grus*) and Goosander (*Mergus merganser*).

To date, some 20 taxa of freshwater fishes have been recorded, all endemic to the Adriatic basin and several described from the Dinara region. Some 20 amphibian and reptile species have been recorded, with the rare and endangered karst meadow reptile, Orsini's viper (*Vipera ursinii macrops*), and the unique cave salamander, the olm (*Proteus anguinus*). 23 mammal taxa have been recorded for Dinara, including the largest predators, bear, wolf and lynx, and an endemic and endangered species of rodent, the Balkan Snow Vole (*Dinaromys bogdanovi*). The large and likely very diverse and endemic invertebrate fauna of Mt. Dinara is still very poorly known. These are many aquatic taxa as Crustaceans, Insects such as Plecoptera, Trichoptera, Odonata, family Empididae (Diptera), and the terrestrial groups such as Orthoptera, Coleoptera, Lepidoptera, following by arachnids, especially spiders, myriapods and other groups with many endemic and endangered taxa. The invertebrate cave fauna is also rich, with more than 100 taxa recorded for Mt. Dinara, including many stenoendemic, rare and relict taxa.

Several breeds of domesticated animals have developed here, such as: the Dalmatian bušak horse, coastal-Dinaric donkey, buša cattle and Dalmatian grey cattle, Dalmatian pramenka sheep, white and grey domestic goat, Mediterranean honey bee, and the shepherd dogs Croatian shepherd and Tornjak. It is very important to preserve traditional cattle breeding to ensure the preservation of the pastures and meadows with their numerous rare, endemic and endangered vascular plants and rich accompanying fauna.

National nature conservation systems and protected area designation efforts

Mt. Dinara is geopolitically divided between Croatia and Bosnia and Herzegovina as it straddles the border of the two countries. The Croatian part of the proposed Dinara transboundary protected area falls within two counties: Šibenik-Knin County and Split-Dalmatia County, which are the regional authorities responsible for the area. The proposed protected area falls within the territories of ten different municipalities: Knin, Kijevo, Biskupija, Cijlpane, Drniš, Vrljika, Hrvace, Sinj, Otok and Trilj. In the Federation of Bosnia and Herzegovina, Dinara belongs to Canton 10. The state-level Ministry of Foreign Trade and Economic Relations primarily has a coordinating role with regard to environmental and energy issues. The ministry has limited implementing capacities, but coordinates its activities through the entities. Also, the Ministry represents the state at the international level with regard to the environment. The state level focal point for implementation of the Convention on Biological Diversity is the Federal Ministry of Environment and Tourism. As the CBD focal point, the Ministry is responsible for communication with international bodies, the initiation of activities required by the Convention and coordination with other relevant authorities and concerned stakeholders. The Federal Ministry of Environment and Tourism is responsible for the designation of national parks, while cantonal ministries are responsible for the designation of nature monuments and protected landscapes.

In the Federation of Bosnia and Herzegovina (FBiH), one of the two entities of BiH, nature protection is regulated by the Nature Protection Act, which defines the conditions and modes for sustainable protection and management of natural areas, and the responsibilities of the bodies carrying out activities in the field of nature protection, and general and special measures for nature protection, information system, funding of nature protection, monitoring, etc. The main document defining the concept and principles for efficient protection of protected areas in BiH is the Act on the Designation of Protected Areas. This Act should be passed for each protected area separately. Several protected areas in Bosnia and Herzegovina are yet to be encompassed by such a document. This Act defines the precise zoning, protection measures, interventions in protected area, use of natural resources and management policies.

Projections for the establishment and development of new protected areas in FBiH are based on relevant documents such as the Physical Plan of Bosnia and Herzegovina (1981; Phase B – Assessment of the natural, cultural and historical values); National Environmental Action Plan guidelines for Bosnia and Herzegovina (2003); strategic documents such as the 'Forest and Mountains Protected Areas' project (funded by GEF and World Bank, 2006) and the Tourism Development Strategy in FBiH (for the period 2009–2019). Experts from various fields have also given valuable inputs that have been used in the preparation of strategies for future protected areas. By initiating and carrying out activities related to the assessment and establishment of protected areas following IUCN criteria and guidelines, NGOs often play a particularly important role.

The Physical Plan of Bosnia and Herzegovina for the period 1981–2000 intended to protect Mt. Šator in Canton 10 as a regional park covering a total area of 8,057.4 ha, and envisaged the establishment of the following regional nature parks: part of Mt. Dinara in Bosnia and Herzegovina (by 2000) with a total area of 2,099.5 ha, Mt. Cincar-Malovan (by 2000) with a total area of 8,753.2 ha, and Mt. Kamešnica (by 2000) with a total area of 754.1 ha. Also, the area of Bašajkovac in the Municipality of Livno was categorised as a 10 ha nature reserve (IUCN category III-IV). The Physical Plan also envisaged the protection of the Ždralovac area, covering 3,976.4 ha as a special nature area (nature reserves, landscapes and nature monuments). In the projection of the development of the protected areas network, the Physical Plan of the Federation of Bosnia and Herzegovina envisaged establishment of the Livanjsko Polje protected landscape (IUCN category V) with a total area of 29,310.6 ha. Livanjsko Polje was declared a Ramsar site in February 2008 (Information Sheet on Ramsar Wetlands (RIS). The Ramsar site Livanjsko Polje was established on 11 April 2008 (Ramsar site no. 1786) with a total area of 45,868 ha.

There is an overall impression that the existing concept of nature conservation in Bosnia and Herzegovina has proven to be ineffective, as it is based mainly upon the purely formal protection of species and establishment of protected areas, together with the absence of reliable environmental information and monitoring systems needed to generate inputs for sound environmental management. Due to the very complex administrative and political organization of the state, it is not possible to implement a planned strategy at the state level. The outcome of this situation is that a very ambitious strategy to protect 15% of the state territory has not implemented at all.

In Croatia, the State Institute for Nature Protection is the central institute dealing with expert tasks of nature conservation, and it carries out a series of activities aimed at ensuring the lasting conservation and improvement of Croatia's natural heritage. It was set up by virtue of a Decree of the Government of the Republic of Croatia in 2002 and started operating in September 2003. It receives funding from the Croatian state budget via the Environment Protection Administration of the Ministry of Environmental and Nature Protection. The Ministry of Environmental and Nature Protection works towards preserving cultural and natural heritage and overseeing its development.

The National Strategy and Action Plan for the Protection of Biological and Landscape Diversity is the fundamental strategic document for nature conservation in the Republic of Croatia. The Ministry of Environmental and Nature Protection is the competent state administration body for nature protection in Croatia. The most important difference between the national legislation on nature conservation and protected areas in Bosnia and Herzegovina and Croatia is the disparate categorization, even in the

terminology for the levels of protected natural areas. The legal powers, especially for land management or ownership rights, are still not established and clarified in either country.

Protected areas are managed by the public institutions for the management of protected natural areas. Public institutions for national and nature parks are established by virtue of a Regulation of the Government of the Republic of Croatia. In Croatia there are currently 19 public institutions at the national level, 20 at the county level and 7 at the local level. The Croatian part of Mt. Dinara is in the process of preparation for designation. The area will likely have the status of a regional park (IUCN cat. V) and the designation process will be completed within the next 3–4 years. According to the current Nature Protection Act (Official Gazette 70/05 and 139/08), following its designation, the two county-level public institutions (one for each county in question) will be responsible for management of the protected area.

Transboundary conservation

A stakeholder meeting on the protection of Mt. Dinara as a cross-border area was held in May 2011 in Šibenik, within the framework of the project “Environment for People in the Dinaric Arc”. The aim of the meeting was to evaluate the possibilities for cross-border cooperation in the Dinarides region between relevant stakeholders from the Croatian and Bosnian-Herzegovinian sides of the mountain. Participants included representatives of local authorities, government institutions, tourism organizations, forestry institutions, NGOs and public institutions. The participants stressed that there is no institution on the BiH side which could be a counterpart to the Public Institutions (PI) on the Croatian side (i.e., PI of Protected Natural Values of Šibenik-Knin County and PI for the Management of Protected Natural Values in Split-Dalmatia County). Another discrepancy between the two sides is that there is currently an ongoing procedure to declare Mt. Dinara as a protected area in Croatia (the State Institute for Nature Protection is drafting the Protection Study), while no such initiative is in place yet on the BiH side.

One of the conclusions of the stakeholder meeting for the protection of Mt. Dinara as a cross-border area was that the signatories of the MoU should be institutions at a high level of governance (counties on both sides of Mt. Dinara in both Croatia and Bosnia and Herzegovina, and the ministries responsible for the nature protection in both states). The main areas of cooperation identified and defined at the meeting were as follows: nature protection, sustainable development (agriculture, tourism and hiking) and cooperation and education (raising awareness, capacity building, establishment of cross-border cooperation for future projects and joint actions).

Finally, the MoU was signed on 22 April 2012 in Knin, Croatia between the Faculty of Science, University of Sarajevo (BiH) and the State Institute for Nature Protection (Croatia). This MoU establishes the general framework for cooperation and participation among the collaborators in the research, monitoring, and restoration concerning flora and fauna with an accent on the wetland vegetation and ornithofauna in Livanjsko Polje and the subterranean fauna on Mt. Dinara. The MoU will provide information on the effectiveness of habitat preservation efforts in protecting endangered species.

Perspectives

The vision of cross-border cooperation of participants in the meeting on the protection of Mt. Dinara (May 2011, Šibenik) as a cross-border protected area starts from the idea of the existence of a common space within the framework of nature protection, tourism, economic and social development, as follows: “The Dinara transboundary protected area is a region with preserved ecosystems, traditions and sustainable development. In addition, the mentioned region will be one of the most recognizable brands of the Dinaric Arc”.

Environmental protection of valuable landscapes, especially karst ecosystems, has been regulated by various laws in both Bosnia and Herzegovina and Croatia, though many land-use plans (at the

local level) do not pay sufficient attention to the environmental considerations, mainly due to the lack of understanding of environmental issues. Therefore, the main opportunities for the long-term transboundary cooperation in the Dinarides region are:

- exchange of information on natural and cultural resources;
- exchange of information on possible common threats to environment and/or nature;
- exchange of information on the results of protective activities undertaken;
- organization of joint conferences, workshops and seminars;
- organization of joint field research;
- preparation of joint management plans;
- preparation of joint nature conservation patrolling;
- collaboration of joint habitat and species management activities.

The most important benefits for the local communities on each side of the state border in this particular region should be the preservation of natural values, halting the depopulation of areas and initiating sustainable development. This includes:

- establishing common resource centres and transboundary 'think-tanks';
- implementing joint scientific projects and programmes;
- standardisation and unification of research and monitoring methodology;
- unification of wildlife inventory methodology and dates;
- organisation of joint sessions of protected area scientific councils;
- cooperation on developing spatial management/land development plans;
- exchange of information on tourism movements, tourism development and available services;
- implementing compatible visitor access regulations and a common visitor 'code of conduct';
- networking for visitor centres within the entire transboundary area;
- unification of visitor services and accommodation standards;
- enhancing common visitor infrastructure design;
- preparation of the common sustainable tourism development strategy;
- development of the joint booking system for tourism services (e.g., accommodation, transportation, guided excursions, cultural events);
- joint promotion of tourist and recreational potential, and marketing of visitor services available on each side of the state border;
- developing a common 'transboundary' logo for the transboundary area;
- non-governmental organizations could be a very important factor in cooperation in transboundary areas.

Concluding remarks

Bosnia and Herzegovina and Croatia are distinguished by a very unique mosaic of high levels of biodiversity. However, the current unsustainable development activities and initiatives such as the construction of new dams and intensification in the forestry sector throughout both countries emphasizes the urgent need for the legal establishment of new protected areas in all major ecosystem types that should be ecologically viable and effectively managed.

There are many common elements of cultural heritage of the populations inhabiting the region of the area. Transboundary cooperation in any form could only result in a positive impact that would mitigate the consequences of the war. One mode of cooperation eventually leads to others and to communication between people who should continue living side by side, especially in transboundary areas. Management priorities on both sides of the state border are quite similar and aimed at ensuring efficient biodiversity protection and management.

4.5 The Neretva Delta

Emira Mešanović Mandić³²



European Day of Parks, Hutovo Blato Nature Park, BiH © Marinko Dalmeatin

Area description

The Neretva River runs over a course of 220 km, making it the longest river of the eastern Adriatic basin. The final 30 km of the river spread out into a 20,000 ha wetland complex formed by large amounts of dissolved material deposited here from upstream. This huge fertile area is the Neretva Delta, which is shared between Croatia and Bosnia and Herzegovina. Most of the delta has been transformed into cultivated land or transport and hydropower infrastructure that have reduced the number of river branches and their associated marshes and lakes. The lower flow of the Neretva River from Mostar (BiH) to the mouth of the river (Croatia) contains the largest and most valuable remnant of the Mediterranean wetlands on the Eastern Adriatic coast and is one of the few areas of this kind in Europe.

The Neretva Delta proves to be richer in the overall number of species when compared to numerous other wetlands of international importance in Europe, though somewhat poorer in the number of nesting waterfowl species. The area is also an important resting place for birds on their migratory routes, and as a wintering ground.

Due to its specific location, climate, complex water regime, etc., the Neretva Delta has high diversity of habitats, especially aquatic and wetland: lakes and ponds, rivers, reed beds, wetland meadows, poplar and willow forests, marine shore and rocky slopes with ancient forests and various types of degraded rocky habitats. Also, there are many man-made habitats, such as hay meadows, agricultural fields, citrus orchards and vineyards, canals, dams and dykes. The hydrological characteristics of the area are very complex: it is intercepted by underground karst springs and a network of currents, springs and lakes mixed with tidal seawater in the lower part of the delta. The Neretva Delta forms the boundary for the distribution ranges of several Eastern Mediterranean and Western Mediterranean species of amphibians, reptiles and mammals (Mateljak, 2011). The south-eastern part of the Neretva Delta forms a refuge that hosts numerous endemic fauna. Elements of fauna from the Middle East and North Africa have been recorded in the area. The north-eastern part of the area is known for the eastern Adriatic endemic species and Central European continental fauna.

The region supports the livelihoods of approximately 60,000 people living in nine municipalities - seven on the Croatian side and two in BiH. The overall demographic situation in the area is stable. The total

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population in the Croatian part is approximately 35,000. There are seven towns and municipalities in the Croatian part of delta: the towns of Metković (13,500), Ploče (11,500) and Opuzen (3,500), and the municipalities of Kula Norinska (2,000), Slivno (1,900), and Zažablje (1,000). The majority of the population lives in the delta area (85% in 28 settlements).

Economic activities of the region, such as industry, agriculture, and tourism, were affected by the war events in the 1990s. Nowadays, farming is the most widespread activity, especially the production of citrus fruits and vegetables in the lower valley and olives at higher areas. There is also traditional hunting and fishing. Even though tourism is seen as one of the promising developmental factors, new tourism resorts and infrastructure, especially the illegal construction of houses, release of wastewater or burning of vegetation have negatively affected the environment of this area. Industrial plants for food processing, wood, metal and the aluminium industry have released untreated wastewater into Neretva, considerably altering the flora and fauna of the delta.

The freshwater ecosystems of the Neretva River are among the most valuable natural resources of the two countries, containing a significant portion of the available drinking water. The Neretva River is situated between the major regional rivers (Drina River in the east, Una River in the west and Sava River in the north). The Neretva holds a significant position among the rivers of the Dinaric Arc region due to its diverse ecosystems and habitats, flora and fauna, and cultural and historical heritage (Mateljak, 2011).

The Neretva Delta is under intense anthropogenic pressure. There are nine hydropower plants that use water upstream of the Neretva Delta in the Neretva and Trebišnjica catchments. The delta attracts attention because of its beauty and economical potential. The regime and quality of the groundwater in the basin have been modified by the construction of hydropower plants in the basins, construction of roads and urban centres in the delta area, gravel exploitation in the watercourse, sand in the estuary, swamp drying and amelioration into agricultural soil (Soldo and Mesec, 2010). Various forms of human activities in the region have often led to the depletion of natural resources, making sustainable development and conservation in the region particularly difficult but also necessary. Potential threats to conservation include: uncontrolled intensive sand and gravel excavation, illegal waste disposal, unsustainable hunting and fishing, excessive use of pesticides and artificial fertilizers in intensive agriculture.

Nature conservation

Approximately 45% of the area (9,031 ha in the two countries) is officially protected under national nature conservation regulations, and virtually the entire area (11,500 ha in Croatia and 7,411 ha in BiH) is recognised as a Wetland of International Importance under the Ramsar Convention. The Neretva Delta (Croatia) has been recognised as a Ramsar site since 1992, and the Hutovo Blato wetland (BiH) since 2001. Moreover, Hutovo Blato was protected as a nature park in 1995 and is managed by a public authority. Furthermore, the Trebižat River is another proposed nature park in Bosnia and Herzegovina.

Three protected sites in Croatia are ornithological reserves (Pod Gredom, Prud, Orepak), one is an ornithological and ichthyological reserve (mouth of the Neretva River), and two are protected landscapes: (Modro Oko/Desne Lake). Parila Lake has been proposed as an ornithological and ichthyological reserve and Kuti Lake has been proposed as an ornithological reserve.

According to the Physical Planning Strategy of the Republic of Croatia and the National Biological and Landscape Diversity Strategy and Action Plan, the entire Neretva Delta is envisaged for protection as a nature park (Neretva Delta including the river catchment from Počitelj to the river mouth). Article 22 of the Nature Protection Act of Croatia regulates the procedure for the designation of protected areas. The State Institute for Nature Protection (Croatia) is responsible for producing a feasibility study for designation and is obliged to incorporate all public comments into the feasibility study. According to Croatian law, a transboundary protected area (TBPA) of the Neretva Delta would correspond to the

category of a regional park; however, the nature protection law in Bosnia and Herzegovina does not include the category of regional park. Therefore, a major challenge for establishing the TBPA in BiH is to detect the relevant mechanisms to effectively and jointly follow the process from the both sides of the border.

The feasibility study for proclamation of the Neretva Delta Nature Park has been drafted by the State Institute for Nature Protection of the Republic of Croatia. A pre-feasibility study has been drafted for proclamation of the Trebižat Nature Park in BiH. There is also an initiative to expand the current boundaries of the Hutovo Blato Nature Park. If all these initiatives are successful, more than 20,000 ha of the Neretva Delta transboundary area will be protected as a nature park in both countries.

Protected areas in the FBiH are under the responsibility of the Federal Ministry for Environment and Tourism and are managed by public institutions, i.e., the Hutovo Blato Nature Park is managed by the Public Institution of Hutovo Blato. In Croatia, the most important institutions responsible for nature conservation are the Ministry of Environmental and Natural Protection and the State Institute for Nature Protection. Protected sites in the Neretva Delta are managed by the Public Institution for the Management of Protected Nature Areas of Dubrovnik-Neretva County.

In the case of designation of a TBPA, new joint management mechanisms/plans will be examined by the responsible institutions and cooperation between management bodies will be well defined. Besides several local NGOs active in promoting the values of protected areas, civil society organisations are not involved in the protected area management.

Transboundary conservation

Several initiatives and projects have been implemented in this region to promote the mechanisms and opportunities for establishing transboundary collaboration and TBPA. Some will be mentioned through this case study.

The Ministry of Environmental Protection, Physical Planning and Construction of the Republic of Croatia, together with the Ministry of Environmental Protection, Physical Planning and Construction of the Herzegovina-Neretva Canton in BiH implemented the project “Transboundary Management Plan for the Lower Neretva Valley” in 2001/2002 through the Ramsar Small Grants Fund. However, serious efforts are still required to finalize this plan. Nevertheless, this project created an inventory database of the natural values of the Neretva Delta, tested the Mediterranean Wetlands Initiative (MedWet) database tool, and involved the local communities in the process of wetland evaluation, planning and decision making. A few years after this initiative, the MedWet Committee initiated the signing of a MoU on transboundary collaboration in the environmental protection of the Neretva Delta between representatives of the Ministries of Environment from both countries and several key stakeholders, such as Hutovo Blato Nature Park and water management agencies. The establishment of the joint Neretva Delta Forum as a result of the efforts of the Regional Environment Centre, with the aim to serve as cross-border communication and coordination platform, is considered one of the most important achievements in establishing a permanent platform for transboundary collaboration in this region (Marczin et al., 2007b).

Building upon the results and findings of the above nature conservation initiatives, three organisations IUCN, WWF and SNV initiated the collaborative project “Environment for People in the Dinaric Arc” that enhanced collaboration among local stakeholders aimed at transboundary conservation.

Multi-stakeholders meetings were scheduled in the early phases of this project. The meeting for the Neretva Delta was held on 14 March 2010 in Čapljina, BiH in cooperation with prominent NGOs: Lijepa Naša Čapljina from BiH and Modrozeleni Metković from Croatia. Thirty participants/stakeholders (NGOs, local municipality, protected area managers and institutions, academia, local business, local experts) attended the meeting to create a joint vision. Political support to the initiative was ensured through the active participation of the Federal Ministry for Environment and Tourism (Bosnia and

Herzegovina) and the State Institute for Nature Protection (Croatia). This important gathering resulted in the creation and official signing of a Memorandum of Understanding between the two NGOs, and provided a mandate to work towards realisation of the joint vision. The joint vision determined by MoU reads as follows:

The Neretva Delta cross-border area has been institutionally defined for a ten-year period as a single biological and ecological area with the establishment of full natural balance and efficient mechanisms for the preservation of nature and the environment. An integrated model of functional co-existence between the local population and the Neretva River has been found, as a specific natural phenomenon abounding in endemic flora and fauna. All commercial activities to be developed in this area will be required to be fully aligned with the ecosystem.

The signatory NGOs also agreed through the MoU that their cooperation will be focused on achieving the following objectives:

1. Provide support for the creation of an institutional framework for the protection and management of cross-border areas of the Neretva Delta
Measures to achieve objective 1:
 - spatial evaluation plan (biological);
 - development of the cross-border protected area management plan;
 - determination of ecologically acceptable flows;
 - participation in the development of the necessary Croatian legislation and contribution to alignment of the same with the EU Directives.
2. Provide support for the implementation of integrated agriculture and harmless technological processes
Measures to achieve objective 2:
 - implementation plan for integrated management of space and resources (pesticides, artificial fertilizers, salinification and illegal amelioration of wetlands);
 - determination of ecological acceptable flows.
3. Stimulate activities aimed at the development of selective forms of tourism
Measures to achieve objective 3:
 - action plans for the development of selective forms of tourism in protected areas;
 - promotion of the Neretva Delta cross-border area as a unique tourism destination with recognisable brands (traditional boat marathon, summer carnival).
4. Formation of a core of scientific research work in protected zones (Hutovo Blato Nature Park in BiH, Neretva Delta in Croatia)
Measures to achieve objective 4:
 - monitoring the state of ornithofauna, ichthyofauna, plants, vertebrate and invertebrate fauna, fungi, lichens;
 - monitoring the state of the hydrology and hydrogeology.
5. Education of the local population on aspects of respecting the ecosystems of the Neretva River
Measures for achieving objective 5:
 - education of hunters and fishermen;
 - education of farmers on the topics of applied integrated production;
 - promotion (outreach).

Several activities are implemented towards these objectives within the project “Environment for People in the Dinaric Arc”. Besides various community-engaging educational and promotional events, significant efforts were made to map and draft the Action Plan for the protection of the endemic fish species Dalmatian Nase (*Chondrostoma knerii*) and its habitats. Presentation and promotion of this Action Plan will advance the protection of this species in the cross-border area. In order to emphasize this issue, educational workshops/seminars were organized for local fishermen where their role in the sustainable use of natural resources was discussed.

Finally, based on the MoU, a joint project proposal was developed to support the designation of Neretva Delta transboundary area as a UNESCO Biosphere Reserve. The main driving forces behind this transboundary initiative are the local environmental NGOs (Lijepa Naša from BiH and Modrozelena from Croatia), with the support of the State Institute for Nature Protection (Croatia), the Federal Ministry of Environment and Tourism Bosnia and Herzegovina and WWF MedPO.

Perspectives and conclusions

Undoubtedly, there are many reasons to advocate transboundary conservation in the Neretva Delta. Above all, TBPA shall be seen as an instrument for preserving the rich biodiversity of this area and therefore exploring solutions for overcoming problems such as unsustainable fishing and hunting, uncontrolled construction etc. Active non-governmental organisations, academia and experts can work to raise the awareness of local communities, to support scientific research and to organize educational events/forums. However, the real agents of change are the institutions that possess official instruments to designate these areas as a TBPA. Hence, prior to transboundary conservation, more work is needed towards the designation of the Neretva Delta Nature Park in Croatia and adoption of a relevant protection act in BiH.

Only coherent and systematic action can produce valuable results. It is important to stop further degradation of remaining wetland habitats and carry out restoration of lagoon and highly productive areas. The responsible institutions should support the process to develop a bilateral management plan that would cover the Neretva Delta in Croatia and the Hutovo Blato wetland in Bosnia and Herzegovina. The plan could serve as a framework for bilateral cooperation between the two states for the conservation of wild taxa that regularly migrate across national borders, and for the coordination of research, management and conservation measures such as habitat protection and hunting regulations. A joint monitoring system, especially of fish and bird populations, is also required, in addition to regular information exchange among the local and national authorities. At the society level, it is important to intensively promote the Neretva Delta as a potential TBPA and joint tourism destination. Education of local farmers and wider stakeholders groups about the opportunities, and not only the threats related to protection status, is of the utmost importance.

4.6 The proposed transboundary Tara-Drina Biosphere Reserve

Aleksandra Mladenović³³



Tara National Park, Serbia © Mirjana Mijanovic Petkovic

Background

The area which includes the future transboundary Tara-Drina Biosphere Reserve³⁴ stretches along the central part of the Drina River in the bordering area between south-western Serbia and eastern Bosnia and Herzegovina (BiH). The border extends over 383 km, of which 229 km is a river border. The main geographical features defining the boundary between the two states are rivers and mountains, especially the Drina River, the largest tributary to the Sava River with a catchment area of 19,946 km². The river's natural state has been disrupted by the construction of two hydropower plants and several artificial lakes in the region of Višegrad, Perućac and Zaovine, such as Lake Perućac, which was formed by the damming of the Drina River. The remainder of the border crosses through mountain meadows and forests. This is primarily a mountainous region of the Dinaric Alps that includes specific karstic landscapes with deep gorges and canyons. It is a refuge for unique fauna and large predator species such as brown bear, wolf and golden eagle. This region is very rich in biodiversity and contains well preserved ecosystems, endemic and threatened plant species and communities, including Serbian Spruce (*Picea omorika*) as the flagship species of the entire area (Belij and Amidžić, 2006).

Throughout the area of the future transboundary Tara-Drina Biosphere Reserve, there are also numerous archaeological sites and cultural heritage monuments. The geographical position, historical and natural processes have all had an important influence on the demographic situation in this region. In both countries, this area lies in remote mountain parts, characterized by negative demographic trends and a low population density. The population is declining every year throughout the area due to negative demographic trends. This is a significant regional problem, as the population is elderly and the workforce is migrating towards larger urban centres (Kadić et al., 2009).

The economy of the area is primarily based on the wealth of natural resources. Agriculture and forestry are the two most important economic activities in the region, while industry is underdeveloped or in decline. Energy production through hydropower plants is a very important economic branch for this region.

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³⁴ The name of the future transboundary Tara-Drina Biosphere Reserve is provisory name given during the implementation of the project "Environment for People in the Dinaric Arc" and consists of the names of the two parts of the region to be included in the transboundary protected area (Tara National Park and the proposed Drina Biosphere Reserve, pursuant to the Spatial Plan of Republika Srpska until 2015).

Tourism has been recognized by the local communities and national authorities in both countries as a field of great potential for enhancing and developing the local economy, but it still accounts for a low share of the product of the local area. Tourism infrastructure is much more developed on the Serbian side, but there remains a strong need to improve and to develop new infrastructure. Despite the great potential for tourism development, there is an evident lack of tourism infrastructure on the BiH side (Horwath Consulting Zagreb, 2007).

Nature conservation

The wealth of landscape, ecosystem, species and genetic diversity make this an area of interest for biodiversity conservation. The first conservation initiatives in this area were undertaken in the 1950s. Later, comprehensive scientific research led to the establishment of several nature reserves and nature monuments. In 1981, the area of Tara Mountain and Zvezda Mountain were designated as Tara National Park in Serbia (Official Gazette SR 3/93). Protection of the valuable border area in BiH is planned in the future, initiated by the local community from the Srebrenica municipality. In 2011, the Institute for the Protection of Cultural, Historical and Natural Heritage of Republika Srpska (BiH) began to collect information to include in the pre-protection study.

The planned transboundary biosphere reserve is represented by a mountain range intersected by many gorges and canyons, the most impressive of which is the Drina River canyon. Diverse geological bedrock and natural historical processes have formed rich and diverse ecosystems and vegetation types. Ecosystems are continuously changing throughout the area creating a mosaic of unique habitats of rare and endemic species. This area has a well preserved environment with a low degree of human impact, primarily because of its isolation and the long history of protection of certain parts of the area.

The Ministry of Environment, Mining and Spatial Planning of the Republic of Serbia is responsible for the formulation and implementation of environment and nature conservation legislation, coordination and monitoring of protected area managers, management plan implementation and other documents and programmes for the protected areas. The Ministry of Agriculture, Forestry and Water Management is the competent authority for natural resource management, and it endorses forest management plans and supervises forest utilization in protected areas. The Institute for Nature Conservation of Serbia, as defined by the Nature Protection Act, is a competent body for issues related to nature conservation in the territory of the Republic of Serbia. It also has the responsibility to provide competent technical opinions and assessments on activities in protected areas and their influence on protected species. It also conducts feasibility studies for protected area designation.

The Tara National Park Public Institution, as the managing authority of Tara National Park, was founded in 1993 and manages the protected area and strengthens the technical and human management capacities and resources. It is mainly financed from its own revenues (taxes, forest cutting, etc.) and only a small number of activities are financed by the state budget. Tara National Park has always been open to international and transboundary cooperation.

Plant communities of old deciduous and mixed coniferous forests on Tara Mountain represent a very good example of well preserved forests with numerous endemic and relict species of indigenous flora and fauna. Special values of the area are the plant communities and unique ecosystems of the Serbian spruce. Characteristic habitats on Tara Mountain include peat bogs, usually found in boreal regions and which house a certain number of glacial relict species. This region has been known as a refuge for many relict plant species, and has played an important role for their survival during the last glacial period (Gajić et al., 1992). Tara Mountain is on the list of Important Bird Areas (IBA), with a total of 135 bird species recorded. Tara is also identified as a Prime Butterfly Area (PBA), with records of 138 species of diurnal butterflies.

In Republika Srpska, an entity of BiH, nature protection is under the jurisdiction of the Government of the Republika Srpska, the Ministry of Spatial Planning, Civil Engineering and Ecology and the Institute for Cultural, Historical and Natural Heritage of Republika Srpska. According to the studies prepared

by the Institute for Protection of Cultural, Historical and Natural Heritage of Republika Srpska, the National Environmental Action Plan for BiH (2003), the Nature Protection Strategy of Republika Srpska (2007/2008), and the Spatial Plan of Republika Srpska (2010/2015), between 15 and 20% of the territory adjacent to the Serbian border and Tara National Park in Serbia should be protected.

The most important for conservation are the localities of Serbian spruce (*Picea omorika*), designated as special botanical reserves falling within the Rogatica municipality territory. There are cultural monuments of major value in the area of the Rogatica municipality, such as the bridge on the Žepa River which is included on the BiH national list of cultural monuments. Plans are in place to include Borike with its stud farm into the protected landscape category.

The Višegrad municipality is recognized for its rich variety of plants and animals and is widely known as a centre of endemism and an important locality where numerous species of Tertiary flora and fauna can be found. From the conservation perspective, the most important species in Višegrad municipality is also Serbian spruce and a large number of smaller localities with Serbian spruce have been designated as special botanical reserves within this municipality. These localities are designated as Important Plant Areas in Central and Eastern Europe. The most famous natural monument is the *Pisana stena* in the village of Žlijeb, while the Mehmed Paša Sokolović Bridge in Višegrad is included on the UNESCO World Heritage List.

Experts from the Republic Institute for Protection of Cultural, Historical and Natural Heritage of Republika Srpska have prepared studies proposing the protection of the midstream section of the Drina River in the category of a national park. The Republika Srpska Government, at the proposal of the Ministry of Spatial Planning, Urbanism and Ecology, drafted the regulation on protection of this part of the Drina River. The Republic Institute for Protection of Cultural, Historical and Natural Heritage prepared the project documentation and set strict criteria to protect the natural, cultural and historical property in the territory.

Potential for transboundary conservation

Tara National Park was placed on the Tentative List of Serbia in 2005.

In Serbia, the planned future transboundary protected area would comprise protected areas which have been divided into functional zones according to the law and designation studies. The area currently under protection is 36,252 ha, or 57% of the proposed Biosphere Reserve on the Serbian side. The Mokra Gora Nature Park and future Zlatibor Nature Park would also be partly included in the transboundary protected area.

In 2006, the Institute for Cultural, Historical and Natural Heritage of Republika Srpska prepared the basic documentation and submitted the pre-assessment application of the planned Drina National Park to the Ministry of Spatial Planning, Civil Engineering and Ecology of Republika Srpska. The documentation was resubmitted twice in 2007 and 2008. The procedure is underway in the Ministry.

According to the Spatial Plan of Republika Srpska, the future Drina Biosphere Reserve will encompass 1,148 km² in total, of which 626 km² lies in the territory of Republika Srpska, and the rest in Serbia (Kadić and Marković, 2006). It is planned that this potential transboundary protected area will extend over parts of the territory of three municipalities in BiH (Srebrenica, Višegrad and Rogatica), and three municipalities in Serbia (Bajina Bašta, Užice and Čajetina).

In the frame of the project "Environment for People in the Dinaric Arc", two key partners were defined: Tara National Park in Serbia and the Institute for Cultural, Historical and Natural Heritage of Republika Srpska. These public institutions signed a Memorandum of Understanding to improve cooperation in the fields of cultural, historical and natural conservation. They also agreed on actions which have been supported by this project and developed an Action Plan as a joint activity.

During the participative process which included the main stakeholder groups from both sides of the Drina River (public and local authorities, NGOs, private companies, informal citizens' associations, etc.), the common vision was defined, i.e. to *“Establish the transboundary protected area Tara-Drina Biosphere Reserve with an appropriate conservation and management plan in order to help people to benefit using ecosystem services in a sustainable matter”*. The main goal based on this common vision was: *“Giving support to the establishment of a transboundary protected area and preservation of common treasures in the region through enhancement and promotion of cross border cooperation at different levels”*.

The joint Action Plan was developed to demonstrate the strong connection between both sides of the Drina River and willingness to work and cooperate in order to improve the state of overall biodiversity in the region, and also to conserve cultural and historical heritage. One of the specific objectives was raising awareness and capacity on cross-border cooperation through education and promotion of the cultural and natural values of the region. Education of preschool and school children and youth has proven to be one of the best methods to achieve the goals of protection and improvement of the state of environment and nature. Work with schoolchildren and youth offers an opportunity to influence not only their consciousness, but also the consciousness of adults, because children are the age groups that will use their knowledge to establish a better system of valuation of natural resources and ecosystem services in the following period, for their own future. Therefore, this Action Plan envisions a set of educational tools, relating to the conservation of natural resources.

Educational activity is promoted through regular activities of Tara National Park on the Serbian side and the Institute for Cultural, Historical and Natural Heritage of Republika Srpska on the BiH side, as well as during events held regularly in the municipalities located within the future protected area. The participants in this activity are children from kindergartens and primary schools in the municipalities of Bajina Bašta, Čajetina, Užice, Srebrenica, Višegrad and Rogatica. Beneficiaries were primarily local communities, schoolchildren and youth, who became acquainted with the natural values of their environment in an interesting and attractive way, and who learned what to protect in their environment, how to protect it and how to influence adults from their social environment to take care of their natural environment.

Another activity that helped in understanding the role and importance of the future biosphere reserve, with an emphasis on its transboundary character, was a workshop for stakeholders on the *“Relevance and Benefits of Biosphere Reserves, with Special Remarks on Transboundary Biosphere Reserves Experiences and Prospects”*, held in 2010 at Tara National Park. The participants, both from BiH and Serbia, included representatives of local governments, NGOs, public institutions and the private sector in the area of proposed biosphere reserve. Lecturers presented their experience in building and managing biosphere reserves and provided guidance on how to establish good governance and a sustainable management system, with a given capacity in human and natural resources, in this particular area. The participants of this meeting discussed the roles, rights, constraints and benefits for specific local communities and for people in general related to ecosystem services and natural resources of the proposed transboundary biosphere reserve.

In recent years, the responsibility for sustainable management of protected areas has been placed mainly at the local level. Their effectiveness in managing activities depends greatly on the specific situation in the field, as well on the level of involvement of different stakeholders in managing the process. The local communities, their representatives and the population living in the area of proposed transboundary biosphere reserve had direct benefits of all activities within the Action Plan proposed and realized in the frame of the project *“Environment for People in Dinaric Arc Region”* for this site. Support gained from the local community, including administration and authorities, is necessary and crucial for the nomination procedure, regardless of the level and degree of protection.

Many local people, especially farmers and owners of fields, lands and forests, believe that protection will only bring damage and losses, because *“someone else”* will manage their lands. In order to change this opinion, the Action Plan for this site refers to activities regarding education of the local inhabitants to become more informed about natural values and opportunities, if the territory where they live and

work were to become protected. In that respect, promotional material in the form of a documentary was made and promoted on local TV, radio and newspaper/bulletins. The movie about the future transboundary biosphere reserve, produced by the local television stations and NGO experts in the field of media, will also be promoted on national television stations in the region to present the unique opportunity and values of transboundary conservation.

Another specific objective included in the Action Plan was to enhance opportunities for the sustainable economic and social development of local communities and the wise use of natural resources for the benefit of nature and local economies. This included preparation of a study of the economic opportunities and profitability of sustainable use of natural resources and ecosystem services in the area of the future transboundary biosphere reserve. The study provides precise guidance for a desirable direction for the development of the economy in order to harmonize growth and capacities of given resources in the region. The study helps municipalities and small businesses in the region to plan their future businesses in a sustainable way, taking into account the possibilities of the use of various government subsidies in agriculture or in using renewable energy sources. It includes examples of good practice from similar protected areas in the region and in Europe.

Conclusions

A lack of financial means, past conflicts and weak economies led to increased utilization of natural resources by local inhabitants in the 1990s throughout the entire South-Eastern Europe region. Though the economies have been recovering over the past decade, pressures on natural resources remain significant (forestry, limestone extraction). The following pressures on resources continue to persist: degradation of freshwater habitats by alterations of the hydrological regime caused by dam construction and energy-orientated water management; illegal building activities; illegal hunting and fishing; illegal logging and utilisation of forest products; over-extraction of mineral resources; pollution, mismanagement of solid waste; inappropriate wastewater management; and unsustainable tourism development. There is no heavy industry in this region, with the exception of the Varda chemical plant in Višegrad, which is a major threat to the environment.

The proposed transboundary protected area has a wide range of natural and landscape values: endemic, rare and endangered flora and fauna species, habitats, ecosystems and particularly landscape phenomena. The key natural values that would justify the enlargement of a protection of the area are:

- the future transboundary biosphere reserve would encompass almost all the natural stands of the tertiary relict and endemic tree species Serbian Spruce;
- biodiversity richness in general, and the presence of many endemic and relic plant species;
- area-specific geomorphological and hydrological features;
- Tara Mountain as one the most productive forest ecosystems in the Balkan Peninsula.

There is no common governing body to coordinate transboundary cooperation in the proposed transboundary protected area. Establishment of such a body would require fulfilment of several preconditions. Firstly, it is necessary to proclaim the protected area of the Drina Biosphere Reserve in BiH and to establish a protected area of similar status, e.g. national park, on the BiH territory. Secondly, a joint management body could be formed after signing of the memorandum and agreement on cooperation between the two countries. All stakeholders should be included in this type of cooperation.

Transboundary cooperation in this particular area would initiate several direct and indirect effects that would improve the quality of life for citizens on both sides of the border (Radović et al., 2008). The proposed cooperation would create jobs and provide an opportunity for the local population to increase their personal incomes (employed directly within future national park institutions in BiH or employed indirectly through the local market sale of their products). Increased communication between the populations on both sides could be expected to lead to better understanding and bridging of the communities in the area.

The area proposed as the future Tara-Drina Biosphere Reserve contains the most important natural values within the wider region, which is one of the most compelling reasons for its designation as a biosphere reserve. However, there are several problems with nature conservation/challenges in the area and difficulties which are preventing the area to be designated as protected. The first is a lack of finances, followed by poor economic development, social issues and illegal activities which threaten resources.

Opportunities and benefits which are in favour of protecting the entire TB area should be shared with local people and communities in order to get their support and keep them involved in the process. The next steps need to be taken by governments, management authorities, NGOs and local communities for this area to be designated as protected, and then managed in a proper and sustainable manner.



Conclusions 5

Taking a success story forward

Boris Erg

Transboundary conservation continues to prove its great potential and effectiveness in addressing trans-border cooperation, which is often complex in nature and structure. It is essentially the main conservation tool designed to deal with multiple transnational jurisdictions and diverse legal frameworks in its pursuit of nature conservation goals. Overarching and cross-cutting by nature, it tends to fit and serve a wide range of regional and local realities and circumstances. Therefore, the theory of transboundary conservation in many instances tends to remain at the level of general advice and guidance, deliberately not going into detail to prevent losing its wide application potential. The two sides of this coin are that the general principles of TBC are well elaborated in the literature, including stage setting and a framework of guidance for the process on the one hand, while on the other, it creates a gap in terms of tailored tools designed to help practitioners on the ground to embark on TBC. This is all understandable, as there is a risk of falling into the trap of specific local realities and losing the universal value of the messages being conveyed. In trying to close this gap and bridge science and practice, this publication has gone one step further in providing a diagnostic tool that enables self-assessment of the feasibility for TBC based on a range of relevant questions. Indeed, there is no single tool available to help initiate TBC or to suggest giving up the very idea, yet the diagnostic tool provided in this publication may help largely to determine the need for a TB initiative, and to understand the potential and drawbacks in a particular TB setting. There is no such thing as a complete or ideal set of questions, yet we believe that the questionnaire provided is well-balanced and covers all the important issues and aspects central for the initial stages of transboundary conservation development. Apart from helping to assess the feasibility of an envisaged TBC initiative, the diagnostic tool should be used as a generator for collecting the necessary information prior to undertaking any concrete action and as a base for further action planning. The authors recognize that the tool is a living thing, subject to further testing, discussion and development. As noted earlier in the publication, it is strongly suggested that a stakeholder assessment be conducted as an integral part of this diagnostic tool, in order to have a balanced view of the overall situation.

This method of addressing the need for transboundary cooperation and initiating it on the ground is just one step in this often long and comprehensive process, and therefore this publication tends to provide insight into the cycle of the transboundary process, with particular emphasis on the initial steps in establishing cooperation across borders. Every step in establishing and maintaining TB cooperation is equally important and sensitive, and this guideline particularly focuses on its early stages to assist those interested in TBC in initiating and establishing it.

The diverse world of TBC is filled with challenges. Therefore, those dealing with it have to be equipped with knowledge, skills and patience. There are very few examples of easy-fetched short-term solutions to serve the long-term objective of TBC. One is often faced with obstacles and has to be prepared to try out and redo things even several times before moving to another phase of cooperation. This is intrinsically linked with the complex nature of TBC and should be of no surprise to those involved in the process. Therefore it is essential to have a road map and to work jointly on achieving a commonly agreed long-term vision. This publication provides detailed insight into the key components of the TBC process: key elements to be taken into account while planning a TBC initiative, a diagnostic framework that helps understand the situation at hand, methods to determine readiness as this is crucial for the proper initiation of the process and, finally, it gives guidance on how to design the process to make it a possible success. Yet TBC doesn't recognize standardized one-size-fits-all solutions to be applied across the board. Each case has to be assessed against its own reality and the road map defined accordingly. In that respect, this publication tends to recognize local differences and provide guidance applicable in a wide range of situations, while aiming to be consistent with the logic of the guidance it offers. While setting up TBC, one has to respect nuances, as in many cases, these turn out to be the key to successful transboundary conservation. TBC is not a process that is carved in stone; rather, it follows a path of self-evaluation and monitoring, adaptation and readiness to adjust.

Theory and practice are inseparable. They feed each other, with one the proof of the other's validity. So is the case with this guideline. It offers general guidance backed by a series of case studies based on the experience of establishing transboundary cooperation in selected pilot sites in the Dinaric Arc. It also enables sharing lessons learned from the process of establishing a regional cooperation framework in the region. Preceding the work in particular sites, the regional cooperation framework has played an invaluable role in defining conservation priorities, mobilizing resources and catalysing action on the ground. Even though it is given in the form of a succinct description of steps undertaken to establish TBC in the context of a specific project, much of the general guidance on TBC given in the previous chapters of this publication can be recognized and traced in the case studies. It proves their validity and shows that several of the principles have universal value and can be easily applied in different realities. The case studies reveal a great diversity of local settings among geographically and socio-politically related sites, prompting the need to be sensitive to local environments and the ability to respond to the needs on the ground. The Dinaric Arc experience puts stakeholders in the centre of the process. Even though following a similar logic, which suggests that action stems from a joint plan based on a mutually agreed vision and objectives, each case study differs in its local setting, respecting locally recognized counterparts including government-based entities and champion NGOs alike. Ownership is an important prerequisite of successful TBC and it has to be in the hands of those participating in the TBC process.

TBC is open to all types of organizations and individuals alike, and could be embedded in various governance frameworks. It is more the willingness of stakeholders, their commitment and a joint vision that ultimately makes TBC a success story. There is no predefined path or recipe to guarantee the effectiveness of the action undertaken. It is a matter of a wise use of resources within a complex matrix of relationships that makes the difference. The process is fragile and largely depends on the willingness of people to participate and support it. We believe that the framework guideline and the diagnostic tool offered in this publication can facilitate the process of initiating and establishing TBC; however no guarantee can be given it will be successful unless there is the necessary readiness to change and improve. After all, transboundary cooperation is about people committed to working together for the benefit of shared natural heritage. So let us continue working together in the challenging yet rewarding realm of transboundary conservation by using this publication as a set of guiding principles, while also being encouraged to test, challenge and further develop it.

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