# Shifting protected area strategies to evidence based governance and management

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#### Abstract

Protected area governance is dealing with 'public goods' targeted to balance conservation and development. Their exceptional assets and high community-development potential ask for innovative deliberative 'evidence-based governance' which are multilevel, pluralistic, reflective, trans-border, ecological, dynamic and open to changing constraints. Mobilizing the region's potential and applying methods stimulate economy, knowledge development and community interactions. The UNESCO World Heritage sites Swiss Alps Jungfau-Aletsch (CH), Dolomites (IT), Idrija (SLO), and Biosphere Reserves Entlebuch (CH) and Wienerwald (A) represent examples of protected areas with inclusive management approaches in different governance systems.

#### Keywords

World Heritage, Biosphere Reserves, governance, management, change processes, deliberative democracy, evidence based systems, integrated approaches, regional development methodologies

#### Introduction

The studies focus on identifying the state-of-the art, bottlenecks and solutions to optimize the UNESCO World Heritage (WH) and Biosphere Reserves (BR) sites' conservation and sustainable development processes. The safeguarding of nature is mainly implemented by legal measures and protective management systems. The increasing pressure in and around protected areas is mainly due to the increasing land use (e.g. agriculture, energy production), need for resources, enlarging settlements, ecosystem changes due to climate change and others. The legal foundations or governance systems are often insufficient and the political decision processes long, corrupted or delayed. Protected area governance systems, whether state-run, private or mixed, are dealing with 'public goods' targeted to balance conservation and socio-economic development. Their main challenge is to establish new deliberative, multi-level governance models taking into account the territorial evidences and the opportunities for local development.

The objective of the current research is to study innovative approaches of 'evidence-based governance' in heritage sites and protected areas which have to be multilevel, multifunctional, pluralistic, reflective, transnational in capacity, ecologically aware, and dynamically open to shifting constraints. The main challenge is to elaborate and share strategies of participative processes including all relevant governance levels, public and stakeholders. Transferable governance models have furthermore to guarantee heritage conservation and the creation of increased socio-economic benefits. Mobilizing the area's potential stimulates the economy, knowledge development and community interaction. The added value consists in generating innovation and contributing to smart, sustainable and inclusive growth.

Mainly UNESCO and International Union for Conservation of Nature (IUCN)/Ramsar designated sites follow international frameworks and represent the uppermost multilevel governance system, from international to local. In addition, they are requested to establish management systems and plans. In November 2015, new sustainable development strategies for WH sites and BRs were adopted, opening a new dimension for integrated territorial approaches. The strategies encompass knowledge-based development, involvement of civil society, available resources and area's social, cultural and environmental specificities. The EU Commission identified new regional Strategies (e.g. EUSALP for the Alpine Space), and the need to build sound and efficient transnational governance models.

#### Methods

In the EU project CHERPLAN (2011–2014) (ZRC SAZU 2014, RUOSS & ALFARÈ 2013) and the Global Regions Initiative (RUOSS 2013, 2016, 2017) a total of 33 natural and cultural heritage sites in South-Eastern Europe and the Alpine Space with over-used and unused development opportunities were studied. The investigations were based on the WH Convention's and BR's nomination files, management plans and related documents. Websites of the sites and the documents of the WH Centre of the 2nd Periodic Reporting Cycle (2012–2015) were analyzed as was the Final Report for the Europe Region and Action Plan (UNESCO/MAB 2017; WHC 2017). Further empirical information was collected during visits, consultation activities and meetings with site managers.

# Results

The legal governance systems evaluated, show the heterogeneity of the approaches aiming at heritage conservation and sustainable development (Tab. 1). The WH sites Swiss Alps Jungfrau-Aletsch (CH) and Dolomites (IT), are examples of ongoing governance processes towards more coherent interregional and integrated management systems. SAJA has elaborated in participatory processes a management strategy, which mandates the conservation and development tasks to its management centre. Dolomite WH management has the task to supervise and promote the serial WH property and to coordinate the activities of the municipalities and actors in the area. Idrija (SLO) has achieved a model role as a site with integrated development strategies, establishing public private partnerships (PPPs) under the lead of the municipality thanks to a committed mayor and the engagement in EU programs.

Protected area	РА Туре	Governance type	Members
Swiss Alps Jungfrau Aletsch SAJA (Switzerland)	Natural World Heritage site	Public Foundation	23 Municipalities in two Cantons
Dolomiti - Dolomites (Italy)	Serial Natural World Heritage site	Private Foundation	5 Provinces in 3 Regions representing 85 Municipalities in the WH property
Idrjia (Slovenia)	World Heritage of Mercury Almadén and Idrija	Public body	Municipality Idrija
Entlebuch Biosphere Reserve (Switzerland)	Biosphere Reserve	Association of Municipalities	7 Municipalities
Wienerwald (Austria)	Biosphere Reserve	Management GmbH (company with limited liability)	2 Regions representing 51 Municipalities and 7 Municipal Districts

Table 1: Protected areas governance systems studied in the Alpine Space

The Entlebuch Biosphere Reserve was established by municipal referendums, since the population is directly involved in decision taking. The Association of Municipalities with its board and management, represents a public body governing and managing the large protected area on behalf of 8 municipalities. With the participation of the site's management, three PPPs for the tourism promotion and the marketing of local products have been established. The Wienerwald Biosphere Reserve is managed by a private company under the governance of the two regions. In both sites the municipalities together with the local population and business are the main driver of activities to conserve and develop the area.

### Discussion

The examined protected sites possess a fair amount of social and environmental capital. Their assets are exceptional natural values with high community-development potential. Often they are less favored due to their remoteness, the risks related to climate conditions, a vulnerability rooted in natural hazards and disadvantaged socio-economic development. The complexity of multilevel governance systems from international to local realities is hindering development. Varying governance approaches, different legal, institutional and financial conditions, difficult public and stakeholders involvement lead to discrepancies. New deliberative governance approaches for protected areas including local sustainable development is central in overcoming the obstacles.

Facilitating a sustainable development in and around protected areas, thus creating deliberative governance systems involving stakeholders and civil society, could significantly create new job opportunities, added values and income for indigenous people. The balance between protection and local development will increase knowledge, awareness and responsibility of the actors and decrease pressure on the wilderness.

Evidence based territorial governance encompasses the three dimensions Top-down, Bottom-up, Outside-in (Fig.1). International and national bodies have to lead the Top-down process defining the overarching norms, principles and objectives, facilitate the elaboration of evidence frameworks, and delegate authority and accountability to the operative level. The international organizations may facilitate standard setting, knowledge dissemination and transfer, and transnational harmonization. The national authorities are required to provide legal and evidence frameworks, deliberative policy instruments and coherent funding as basis for efficient territorial governance.



Figure 1: The holistic approach of territorial governance is based on local evidences engaging the three dimensions Top-down, Bottom-up, Outside-in.

Local policies have to focus on Bottom-up processes defining strategies and objectives based on local place-based evidences such as resources and needs as well as to support decision taking and the area management. The local population will, not only participate, they will profit from the share of benefit and added values as a return of their investments and increasingly exchange and cooperate internationally.

The public and private institutions providing knowledge, funding, networking, and facilitate the environment for research and innovation as well as the communication systems will have a key role in the Outside-in processes.

The results show the diversity of legal and organizational frameworks, their transformation needs, processes and new approaches tested so far in protected areas. Innovative governance and management frameworks and methodologies such as the Outcome-Oriented Public Management (SCHEDLER & PROELLER 2010), the Social-Ecological Systems (SES) (MCGINNIS & OSTROM 2014), SDI method (RUOSS 2007), NEXUS methodology or the Sustainability Profile Matrix (GLØERSEN et al. 2016) have paved the way to adopt new integrated territorial governance approaches.

## Conclusion

Integrated governance approaches of protected areas including sustainable development strategies aim at knowledge-based development involving local society, adapted to available resources and area's social, cultural and environmental specificities. The protected areas studied represent examples with inclusive management approaches in different governance systems. All the governance models still show their roots in the traditional top-down approaches with a management system focused on coordination and have not yet adopted integrated evidence based approaches with holistic participation and decision processes.

Future research will have to facilitate mutual learning and exchange among different multilevel governance systems and explore ways and methods of shifting to evidence-based governance models. The interactions of the three dimensions will further contribute to the efficiency of mitigation and adaptation to future challenges such as climate change, migration, social transformation and globalization.

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