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WP4: Novel Processes and Tools in Multi-Level Governance in Europe

Report

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“Multi-level Governance of Natural Resources: Tools and Processes for Water and Biodiversity Governance in Europe” (GoverNat)

Objectives

The **overall objective** of GoverNat is to develop new solutions for multi-level environmental governance and to facilitate their use by decision makers in an enlarged EU. The **central research objective** is to test the hypothesis that certain participatory processes and analytical decision tools are particularly useful for improving multi-level environmental governance. **Specific research objectives** therefore address the enhanced understanding of multi-level governance of natural resources, the development of methods of public and stakeholder participation to be used in such contexts, the effective utilisation of specific analytical decision tools in multi-level governance, and the reflective evaluation of such use. These four tasks are necessarily interdisciplinary. The **central training objective** is to give 9 doctoral and 3 post-doctoral fellows an interdisciplinary training 1) in research on environmental governance, particularly of biodiversity and water, in Europe, and 2) in designing legitimate and effective solutions for communication between policy makers, scientists and the public in science/policy interfaces.

Consortium

1. UFZ – Helmholtz-Centre for Environmental Research, Germany (F. Rauschmayer);
2. ECOMAN - Ecological Economics and Management, Lisbon, Portugal (P. Antunes);
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9. IELM-SIU - St. Istvan University, Budapest, Hungary (G. Pataki);
10. IREAS - Institute for Structural Policy, Slovak Republic (L. Slavikova).

Characteristics

- EU Marie Curie Research Training Network with 9 doctoral and 3 post-doc fellows
- Duration: 4 years (10/06 – 9/10)
 - Doctoral fellows: 4/07-6/10
 - Post-docs: 7/07-1/10
- 10 partners and several praxis affiliates in 9 European countries
- Coordination: Helmholtz-Centre for Environmental Research – UFZ (Dr. Felix Rauschmayer)
- Total contribution of European Commission: 2.4 Mio €

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Executive Summary:

The environmental governance in Europe has been undergoing massive changes. The changes are effects of increasing human pressure on the environment, climate changes, but also are due to the political process of the European integration. The vertical and horizontal dispersion of the central government authority, referred to as multi-level governance, resulted in an increasing role of non-state actors and new mechanisms for horizontal and vertical co-ordination. This has initiated expansion of a whole range of formal and informal novel tools and processes that connect various state and non-state actors in policy-making across levels.

The implementation of novel approaches in environmental governance has been challenging in particular in the new EU member states, where political decision-making is still affected by post-socialist relations and massive ongoing institutional changes, oftentimes resulting in inefficient institutional design and over-exploitation of natural resources.

The report assesses six cases of introduction of new tools and processes in natural resource management written by GoverNat researchers. The cases of novel processes cover the introduction of Water Framework Directive in Czech Republic, the introduction of new management practices in protected areas in the Slovak Republic, and the role of NGOs in the implementation of the Birds and Habitats Directive in Hungary. The fourth case examines the potential of volunteer involvement as new actors in conservation site management at Lake Ahtialanjärvi in Finland. We also present two cases showing possibilities of applying novel tools in resource management. The first of these cases focuses on using experimental methods with stakeholders and the second discusses conditions under which market-based instruments can contribute to sustainable natural resource management.

Applying *experimental methods* in natural resource management shows that stakeholders pay attention not only to economic efficiency of governance regimes but also to equity and solidarity in the resource access. The analysis of the introduction of *market-based instruments* in biodiversity governance reveals that markets may contribute to sustainable resource management and decrease burden for the public budget but that they require proper legal settings. Clear property rights, rules on information dissemination, monitoring, and sanctioning of wrong-doing are preconditions when applying this tool.

Common feature of the comparison of cases studying novel processes in multi-level governance is the role of *complexity and information*. The analyzed cases show that the changes and new rules are unclear in some way to most of actors and that the uncertainty strongly affects their attitudes. Although the processes are legitimate, in all cases the processes were characterized by a whole range of informal processes and a different interpretation of the formal rules. The social dynamics are closely connected with the role of information and knowledge. In each presented case participating actors have different interpretations of the environment and different ideas on how to solve problems and conflicts. These different interpretations cause lack of understanding and communication problems.

The analysis of the presented cases suggests that an important element of promising *participatory processes* that can integrate actors is early participation. It is crucial that the actors develop common understanding step by step. Their involvement at an early stage

furthermore enables gradual learning. The discussed cases show that the administration has often a technocratic view of nature and tries to fulfil formal procedures and codes of conducts which are often disregarded by other stakeholders. The participatory processes are often not truly open to the involvement of actors and treat the outcomes of the participatory processes not as binding agreements but only as recommendations.

The evaluation of the cases also shows an important *role of information* and knowledge. Lack of information and lack of understanding of different types of knowledge posed serious communication barriers. Finally, the introduction of changes in natural resource management might be blocked to due interests of groups of actors who in various ways benefit from the status quo. Such changes in the power balance are oftentimes found in cases where the EU directives introduce new bodies or practices into the national decision-making. Often, the new actors are introduced only formally to fulfil the EU requirements; however, they have only very weak impact on decision-making due to lack of information, exclusion, but also due to lack of financial and physical capabilities.

Case studies offer new forms of participation to co-ordinate and achieve policy objectives across levels thus contributing to the development of participatory processes in EU multilevel governance that can be applicable also in Central and Eastern Europe. Emergence of multilevel governance in new member states has specific problems as in post-socialist countries the participatory processes were initiated due to top-down courses of action. Such were e.g. changes in the property rights after the transformation or the implementation of EU directives. The key questions addressed are how prevailing post-socialist institutional factors, such as a weak legal framework and the absence of participatory practice, affect the functioning of new EU institutions and whether it may trigger behavioural change at the national and sub-national levels. The role of the state in the new forms of governance is crucial. The failure of national states to develop and co-ordinate proper multilevel institutions poses the need to revisit research into the role of the state in multilevel governance, in both horizontal and vertical co-ordination.

This report is based on the book KLUVÁNKOVÁ-ORAVSKÁ, Tatiana et al. 2010. *From Government to Governance? New Governance for Water and Biodiversity in Enlarged Europe*. Alfa Printing, 234 p. ISBN 978-80-87197-28-8 produced under the WP4 of the GoverNat (chapters 1, 3, 4, 6, 7, 9, 10, 13) and individual work of Cordula Mertens, a GoverNat early stage fellow.

1 Introduction

In the early days of the European Union, environmental policy concerned mostly human health and was largely fragmented and dependent on the national states. The key driving forces behind the development of the initial EU environmental policy were international obligations (Baker, 2003; 2008; Jordan, 2008) initiated mainly by the UN Earth Summit in 1992 and the growing pressure of the global economy, in particular the depletion of natural resources. EU environmental policy was responsive to these pressures. The turning point came in the late 1980s, when a more strategic approach was adopted by the EU, in particular with regard to sectoral integration initiated by the European Council meeting in 1988, known as the Cardiff Process. An important step towards integrative and strategic collaboration was the adoption of the [European Landscape Convention](#) (Council of Europe Treaty Series no. 176) in 2000. Effective from January 2004, it promotes the protection, and co-operation management, of European landscapes and constitutes the first international treaty to be exclusively concerned with all dimensions of the European landscape. However, most of the EU legislation still remained based on centralised enforcement and environmental decision-making based on narrowly defined goals, such as control and efficiency, with the absence of deeper forms of participation.

The ongoing processes of globalisation and European integration have shifted authority away from national states up to the European level and down to sub-national levels, with an increasing role of non-state actors. Governance becomes organised through multiple jurisdictions and can no longer be understood as a central state monopoly (Hooghe and Marks, 2003). This poses a challenging question as to how traditional institutional systems concentrated around a central state can adapt to new roles, where direct control over decision-making is shrinking but demand for co-ordination of the complex social arena is expanding. Key issues here relate to ensuring democratic decision-making in the process of transformation from traditional governments to governance.

The Overall Objective of the project *Multi-level Governance of Natural Resources (GoverNat)* is to develop new solutions for multilevel environmental governance and to facilitate their use by decision makers in an enlarged EU. Specific research objectives

therefore address the enhanced understanding of multi-level governance of natural resources. The objective of the GoverNat Work Package 4: *‘Empirically applying refined tools and processes in case studies’* was thus to identify strengths and weaknesses of improved processes and tools (DOW).

2 Multilevel governance

The terms government and governance consist of a rule system through which decision-making is conducted but, while government is linked to activities backed by formal institutions and authorities, governance refers to larger social processes and functions, including informal and formal institutions and multiple actors (Rosenau, 1992; 1997); in another definition, government refers to the formal processes of political control at a central sub-national level and governance, to the co-ordination of social relations in the absence of a unifying authority (Bache and Flinders, 2004). Governance implies the involvement of various actors that are independent of a central power and operate at different levels of decision-making (Rhodes, 1996; Stoker, 1998).

Multilevel governance was first devised in the EU policy-making by Hooghe and Marks (1993) in relation to Southern European enlargement in the late 1980s, in particular with respect to the implementation of regional and structural policy reforms. It has been extensively discussed by numerous scholars (Marks, 1993; Jordan, 2008; Rosenau, 1992; 1997; Bache and Flinders, 2004). The initial objective of the EU policy-makers was to adapt governance systems under the existing treaties addressing new policy challenges for the future of the enlarged European Union. In the EU definition, governance means rules, processes and behaviour that affect the way in which governing is exercised at the European level, particularly as regards openness, participation, accountability, effectiveness and coherence (EC, 2001).

Multilevel processes also affected environmental policy of the European Union. The need for co-ordination and dispersion of competencies from the EU to national and sub-national levels as well as respective bottom-up processes back to the EU level was transposed into the new directives, such as the Birds Directive (79/409/EEC), Habitats Directive (92/43/EEC), and Water Framework Directive (2000/60/EC), also attempting to address the need to co-ordinate the multilevel character of governance as water and biodiversity constitute resources transferable across sub-national and national borders.

These directives also require horizontal co-ordination of competencies among authorities and non-state actors (such as sectoral interests and EU interests, e.g., common agricultural policy, biodiversity policy, etc.), but also vertical co-ordination among decision-making levels (implementation, monitoring, etc.) These processes are accompanied by various difficulties, such as those arising from the diversity of EU participatory practices and collective actions or dominance of natural sciences in designing and implementing laws and policies (Baker, 2003). An illustrative example can be the designation of Natura 2000 sites implemented upon narrow scientific criteria (Pavoola et al., 2009).

The dispersion of central government authority, both vertically to actors located at other territorial levels and horizontally to non-state actors, is defined as multilevel governance (Bache and Flinders, 2004). Similar concepts used to describe such development are multi-tiered governance, multi-perspective governance (Marks and Hooghe, 2004), condominio (Schmitter, 1996), and polycentric governance (Ostrom et al., 1961), global governance (Bierman, 2007).

European multilevel governance is thus seen as a more state-centric system with vertical authorities (supranational, national and sub-national), which does not fully incorporate the existence of horizontal actors that do not operate within formal authoritative structures (Bache and Flinders, 2004) such as non-state actors. Furthermore, the EU multilevel governance style is not uniform but can be characterised by a variety of governing approaches originating in three generic forms of economic organisation defined by Williamson (1979; 1991). The most typical is the hierarchical approach operating at the supranational and national levels, the market approach for the regional level, and the hybrid approach for local and cross-border co-operation. The key novelty in Europolitics thus lies in the growing dissociation between territorial constituencies and functional competencies (Schmitter, 2000), resulting in vertical and horizontal co-ordination problems. Examination of institutional performance should thus look at the linkages among distinct institutional arrangements at the same (horizontal) level of social organisation and (vertically) across levels (Pavoola et al., 2009).

Biodiversity and water governance are in the primary focus of our analyses as the key formal EU institutions 'Water Framework Directive' and 'Habitat Directive' require interactions at multiple scales and their respective ecosystems.

3 Description of the case studies

The importance of rules, sanctions and communication for solving social dilemmas of natural resources are seen as a novel tool to study collective actions for the governance of forests as common pool resources as described in the first research study. An experimental methodology with an innovative component of ecosystem dynamics was tested in the new European democracies of the Czech Republic, Slovakia and Cyprus and provides insights into a number of policy issues. The authors developed an experiment on common pool resources by addressing the effects of communication between participants. The research highlighted the possibility to use experiments as awareness-raising tools, promoting the value of cooperation, and may contribute to the design of effective natural resource management strategies. The second example of novel tools for biodiversity governance discusses the development and the emergence of market-based instruments for biodiversity conservation in Central and Eastern European Countries. The analysis indicates that market-based instruments can be beneficial for biodiversity conservation and, in conjunction with traditional regulation, they can be seen as an essential tool for supporting conservation objectives and biodiversity governance in a multilevel context.

Regarding the studies on novel processes in biodiversity governance, the first case evaluates recent public participation processes in water governance in the Czech Republic. The study shows that due to the improper legal background and lack of experience with public participation in Czech water management, participatory processes are often implemented only pro-forma, without creating social capital and eliminating conflicts. The second case concerns the interplay of forestry and biodiversity regimes in the Slovak Republic. It identifies two types of institutional structures for forest management of national parks that were created in different time periods. Today, they are both seen in interaction with a new governance framework for biodiversity. The third case analyses how and why NGOs could exercise agency at different stages of the ongoing implementation process. In the phase of site designation, NGOs played an influential role based on their expertise and excellent knowledge of the process. NGOs were able to use the new opportunities for participation offered to them thanks to good

cooperation with the ministry and among each other, and are now taking their role as “watch-dogs” for the EU. The last study contrasts the previous analyses focusing on the new member states with novel participatory processes present in Finland. It discusses the potentials of volunteer naturalist involvement in conservation sites management. It allows exploring the complex local governance networks and the opportunities and challenges facing volunteer naturalist participation in the implementation of the Birds and Habitats Directives.

Table 1: *brief descriptions of each case study*

Authors	Title of case	focus
Dimitrios Zikos Tatiana Kluvánková-Oravská Lenka Slavikova	Experimental perspective on multi-level governance	Novel tools
Veronika Chobotová Tatiana Kluvánková-Oravská	The Role of Market-Based Instruments for Biodiversity Conservation in Central and Eastern Europe	Novel tools
Lenka Slavikova	Performance of the WFD Public Participation Principle in the Czech Republic	Novel processes
Sonja Trifunovová	Increasing Role of Horizontal and Vertical Interactions in Forest Management in Slovak Protected Areas	Novel processes
Cordula Mertens	Agency of NGOs in the implementation of Natura 2000 in Hungary	Novel processes
Mina Santaoja	Potentials of Volunteer Involvement in Conservation Site Management. A Finnish Example	Novel processes

4 Novel Tools

4.1 Experimental perspective to study multi-level governance. Lesson learned from three new EU Member States

Full reference: Zikos D., Kluvánková-Oravská T., Sláviková L. 2010. Experiments on Common Pool Resources: Innovative Tools Providing Multi-dimensional Insights. Experiences from Three New EU Member States. In: From Government to Governance? New Governance for Water and Biodiversity in Enlarged Europe. KLUVÁNKOVÁ-ORAVSKÁ, T. et al. 2010. Prague, Alfa Printing. 233 p. ISBN 978-80-87197-28-8.

Experimental techniques can study typical problems of social dilemmas associated with common pool resources (CPR) and public goods issues with direct applications to resource management. They can examine how incentives and institutions affect decisions and outcomes. In general, they complement the understanding of human behaviour as a

foundation of decision-making in particular for public and common goods under uncertainty. The case study is using common pool resource experiment originally developed by the Centre for the Study of Institutional Diversity (CSID) at Arizona state university (Cardenas et al., forthcoming; Janssen et al., 2010). Experiments are addressing issue of spatial and temporal resource dynamics previously identified in field studies as key variables that influence governance processes. In the GoverNat project CPR experiments were replicated with forest non state owners in three new EU Member States: Cyprus, the Czech Republic, and Slovakia. The objective of the study is to test the assumption that CPR experiments can be used as an analytical tool to predict the behaviour of agents in resource management and decision making. In particular it intends to verify the positive effect of communication on key variables of resource management such as harvesting strategy, the effects of sanctions, type of ownership and resource regime, the role of community identity or the characteristics of collective action and conflict resolution.

The experiments were conducted both in the field and in laboratory, consisting of a series of forestry games with university students and non state owners and users. Slovakia, the Czech Republic, and Cyprus are characterised by significant cultural and political diversity but also similarities, in particular long-term isolation from Western European political processes.

The analysis supports the argument that individual decision-making on common pool resources is formed through extremely complex processes that cannot be replicated under laboratory conditions. The multi-dimensional perspective of the stakeholders largely reflects reality and as such it takes into account issues that can be difficult to acquire by standard economic theories or field studies and might involve very case-specific characteristics and social norms (Janssen et al., 2010, Ostrom, 1998). If identified, however, these elements might greatly enhance policy efforts on the sustainable management of CPR.

The case identified several important issues. First, CPR experiments provided illustrative examples of successful self-organisation and self-governance of commons, in particular by employing acceptance and compliance to informal rules and joint decisions. Second, the role of communication was key for improving group performance and the governance of the commons. This verifies and complements previous findings from field

studies that communication and endogenous rule formation are critical to achieve effective self-governance arrangements.

The employed experimental methodology with the introduction of ecosystem dynamics and communication substantially contributes to policy-making, the design of effective natural resource management strategies, and development of participatory mechanisms at the European, national and local levels.

The research also highlighted the possibility to use experiments as awareness-raising tools, promoting the value of cooperation at the local level. On the whole, the experiment as conducted identified a series of emerging issues urging for further research. Namely, those areas of interest could refer to the following broad questions: *Could policy experiments be employed as tools enhancing learning and capacity building? Could they foster co-operation over competition on natural resources especially in conflicting contexts?*

4.2 The Role of Market-Based Instruments for Biodiversity Conservation in Central and Eastern Europe

Full reference: Chobotová, V., Kluvánková-Oravská, T. 2010. The role of market-based instruments for biodiversity conservation in Central and Eastern Europe. In: From Government to Governance? New Governance for Water and Biodiversity in Enlarged Europe. KLUVÁNKOVÁ-ORAVSKÁ, T. et al. 2010. Prague, Alfa Printing. 233 p. ISBN 978-80-87197-28-8.

The case study presents market incentives as a tool for sustainable biodiversity conservation and effective biodiversity governance in Central and Eastern European countries. Although the development of market-based instruments (MBIs) for biodiversity governance has been receiving increasing attention around the world as a possibly cheaper and more effective alternative to the regulatory approach, it is particularly challenging in post-socialist countries, where the state command-and-control economy disturbed the functioning of markets. The research traces back the development and problems in relation with the emergence of MBIs for increasing the effectiveness of biodiversity governance in Central and Eastern European (CEE) countries. The key factors for success and failure of these instruments are assessed. For comparison of empirical evidence, Poland, the Czech Republic, and Slovakia have been chosen. The

countries were characterized by different roles of private property during the socialist regime and different paths regarding transformation and land restitution also in protected areas after the transformation. The study describes the challenges and difficulties affecting the performance of new market instruments as novel tools for biodiversity governance under CEE countries' conditions. The study concentrates on the uses of MBIs that are specially designed for the conservation and sustainable use of biodiversity in the multilevel governance of the enlarged EU. MBIs are policy tools that use prices or other economic variables to provide incentives for actors to reduce environmental damage, support better environmental practices, and prevent the depletion of a natural resource. MBIs which require active participation of interest groups, such as labelling, tradable permits, certification, etc., emphasise a closer co-operation between public and private actors and help create a sense of partnership and shared responsibility for the biodiversity conservation. Thus, they may trigger behavioural change towards a sustainable economy and are considered a novel tool for improving environmental and biodiversity governance (Baker and Eckerberg, 2008). However, they typically need initial government regulation or state intervention in the form of improving the information and the necessary institutions for market exchange (Mullan and Kontoleon, 2008) to ensure their effective functioning. Or as Scharpf (1997) has pointed out, market instruments usually operate under the 'shadow of hierarchy'. In both new and old EU Member States, biodiversity conservation is mostly subject to government regulation and comes within the sphere of responsibility of the central government (Hovik, 2008). Thus, market-based instruments do not replace but simply supplement traditional regulatory mechanisms.

Market-based instruments are not a panacea for biodiversity conservation, they need a well established institutional frameworks to provide limits in which to operate and are often used in combination with other traditional regulatory instruments. Many examples show that MBIs should complement rather than substitute regulatory approaches. Such a dual approach can avoid the weaknesses and inefficiencies that may occur when adopting either the command-and-control policy or the market mechanism approach alone. The regulatory approach makes sure that an upper limit of biodiversity damages is set at the regional or national level, and the market mechanism approach should assure flexibility and efficiency and should lead to equal distribution of costs and benefits of biodiversity conservation (Nunes and Riyanto, 2005; Muradian et al., 2010;

Pascual et al., 2010). Despite the mixed evidence on the role of MBIs in long-term behaviour changes of consumers and producers towards more environmentally friendly use of natural resources, the significant interest that can be observed towards MBIs can be explained in part by encouraging greater transparency and greater amount of flexibility allowed to the actors to choose how to reach a certain goal. In many cases the introduction of MBIs also helps establish a dialogue among the different interest groups and create trust in the community which previously lacking. MBI can have new governance impact by improving more participatory role for non-state actors (business, NGO) and governmental organizations. Thus, in conjunction with traditional regulation, market-based instruments can be seen as crucial steps and an essential tool for supporting conservation objectives and biodiversity governance in a multilevel context.

5 Novel Processes

5.1 Performance of the WFD Public Participation Principle in the Czech Republic

Full reference: Sláviková, L. 2010. Performance of the WFD Public Participation Principle in the Czech Republic. In: From Government to Governance? New Governance for Water and Biodiversity in Enlarged Europe. KLUVÁNKOVÁ-ORAVSKÁ, T. et al. 2010. Prague, Alfa Printing. 233 p. ISBN 978-80-87197-28-8.

European Union Member States are currently implementing the WFD (Water Framework directive No. 2000/60/EC), including its requirement on public participation in water management. A large number of renaturalisations of small streams and other environmentally oriented measures are expected to be included into water management plans. This also requires a significant shift in the philosophy of the Czech water policy (from a rather technocratic to an ecosystem approach) which causes nationwide controversies and disagreements. Besides this, competent authorities (regional offices supported by former state river basin administrators) have problems in understanding the purpose of public participation in water management and the organization of the process itself fulfils only minimal legal obligations required by WFD (IREAS, 2008).

The study investigates and evaluates the implementation of WFD in Czech Republic, in particular the role of participation in increasing effectiveness of water governance in

the multilevel context of the EU. The case was conducted in three (out of eight) river basin districts in the Czech Republic, covering period 2003 – 2008, from observations of public hearings and 45 interviews undertaken with key stakeholders and representatives of competent authorities and river basin administrators. Evaluation followed seven process-oriented criteria (Muro, 2006, Rowe and Frewer, 2000).

WFD introduces the public participation principle into the existing institutional structure of water management in all EU Member States. The general public and key stakeholders should be informed, able to comment and actively involved in the creation of river basin management plans for the purpose of the future consensual water policy imbedded at the local (river basin) level.

In Czech water management, public participation or generally involvement at the local level in decision-making is practically a new issue. In the Czech Republic (even after the fall of Communism in 1989) water management has been driven mainly from the national level. It means that water and water bodies are declared to be public property and managed by the state's water managers with very limited space for the involvement of local governments or the public (Čamrová and Jílková, 2006). Legal framework for public participation is given by Water Act (No. 254/2001 Coll.), subsequent decree (No. 142/2005) and in particular in accordance with Article 14 of the WFD. However, an institutional basis for active participation of the general public has not been established. Therefore, in practice participation is mainly reduced to the provision of information to the public and receiving consultations. Active participation is practiced with key stakeholders who are organized in interests groups.

The case study indicates that because of weak institutional basis for active participation of general public on water governance there is a great potential for only *de jure* implementation. Based on selected criteria, the performance of the public participation was evaluated as rather poor, especially lacking continuity and support to disadvantaged groups of stakeholders. Despite missing institutional support, the participation of the general public showed better performance than the so-called active involvement of key stakeholders, found to be rather formal.

Despite numerous difficulties and co-ordination problems, evidence is provided that the implementation of the WFD can trigger behavioural change and the adoption of new

participatory practice into the water management regimes at the river basin level in the Czech Republic.

5.2 Increasing Role of Horizontal and Vertical Interactions in Forest Management in Slovak Protected Areas

Full reference: TRIFUNOVOVA, S., 2009. Back to Traditional Forest Management Regimes? In Prognostické práce 2009. Vol 1. No 1. The Governance of the Commons (eds. Kluvánková-Oravská, T., Chobotová, V.) Institute for Forecasting SAS, 100-116. <http://www.progeko.savba.sk/pu/?id=publ&r=2009>

In Slovak Republic, the concept of nature conservation is primarily based on a hierarchical and centralised system of administration. At present, biodiversity governance in Slovakia is subordinated to regional administrations and a centralized state nature conservancy (in contrast to other Central European countries, such as the Czech Republic and Poland, where decision making in nature conservation is undertaken by the respective protected areas administration). The administration acts as an advisory body to the respective authority, but has no actual power; this leads to numerous horizontal and vertical coordination problems (Kluvánková-Oravská et al. 2009).

The study examines the interplay between existing institutions for forest management with institutions established for nature protection, both operating in areas of national parks. In national parks, we identified diverse actors whose activities are related to the forest resources. There are different types of forest ownership and different types of institutional structures for forest management. Private owners, forest cooperatives (common type of property), municipalities and church forest are among the most common types. The study focuses on two types of forest property regimes: the state regime and historical non-state common property regime. These two examples show horizontal and vertical institutional interactions: (i) horizontal interaction between forestry and nature protection regulations, operating at the level of national park, and b) vertical interactions between old institutions (common property regime) for forest resources and current regulatory system. The Tatra National Park and the Slovensky raj NP are the analysed cases.

The first case (Tatra NP) shows conflicting interest of post-socialist institutions for state forest management with new EU institutions for biodiversity conservation. These two institutional systems are failing to coexist. Number of interactions exists but the case shows the failure of the state to create adequate institutions for adaptation of

forest sector to EU governance resulting in sectoral isolation, policies divergence and conflicting relationships of state actors.

A different situation was found in the field study of historical institutional structures for forest management (urbars) in Slovensky raj NP. The regime characterised by traditional values and self-governance is seen sustainable and supportive for biodiversity conservation. Current forms of urbars represents a new form of agency in multi-level governance which would be able to support a new institutional framework (see also Zikos et al., 2010 - case 4.1.).

5.3 Agency of NGOs in the implementation of Natura 2000 in Hungary

Full reference: Mertens, C. 2009. Agency of NGOs in the implementation of Natura 2000 in Hungary. Presented at the Amsterdam Conference on the Human Dimensions of Global Environmental Change 2-4 December 2009 Amsterdam, The Netherlands

With its accession to the European Union in 2004, Hungary became part of the European multi-level governance system and has been obliged to implement all European regulations. In Hungary nature conservation NGOs have been core actors for the implementation of the Birds and Habitats Directive. Environmental NGOs have been influential actors in nature conservation governance since the beginning of the environmental movement in the 1970ies. Based on qualitative expert interviews this study analysed how Hungarian NGOs have been active in nature conservation governance, specifically during the implementation of the Natura 2000 directives in Hungary. Applying the concept of agency as defined in the Earth System Governance Science Plan (Biermann et al., 2009) this research asks whether and why NGOs could exercise agency at different stages of the still ongoing implementation process.

The implementation process of Natura 2000 in Hungary can be distinguished into two main phases – (1) the designation of sites and (2) the implementation of protection measures in the field. The procedure for site designation is different for the Birds and for the Habitats directive. The Special Protection Areas of the Birds Directive (SPA) are directly designated by the member states according to the criteria of the Birds Directive. For the protected sites of the Habitats Directive member states first prepare a list of proposed Sites of Community Interest (pSCI), which is discussed in the so-called biogeographic seminar, for which the European Commission invites representatives of

the member states which have a part of the respective biogeographic region, as well as stakeholders, including NGOs and land users (since all of Hungary is located in the Pannonian biogeographic region, there was only one biogeographic seminar for Hungary). A List of Sites of Community Interest (SCI) is agreed upon in the biogeographic seminar and then adopted by the member states in national legislation as Special Areas of Conservation (SAC). The sites for the Birds and Habitats Directive are supposed to be designated solely on the basis of scientific criteria (i.e. of species and habitat endangerment and protection requirements). From the date of accession to the EU new member states are required to ensure the protection of all sites fulfilling the Natura 2000 criteria.

The analytical problem of agency highlights the important role NGOs can have in biodiversity governance but also points to where the limits of the influence of NGOs lie. The case of the implementation of Natura 2000 in Hungary clearly shows that agency can change with time and the stage of the policy-making process. NGOs, which prior to EU accession had been mainly informally advising and lobbying the government, became important agents for the process of Natura 2000 site designation in Hungary. In the following stage of developing maintenance schemes for the designated Natura 2000 sites, NGOs have also been active with some projects but to date it can not be said that they have been influential and successfully involved in establishing a Natura 2000 maintenance scheme, with the exception of some local cases.

Due to Hungary's accession to the EU, which meant a change in the architecture of Hungarian biodiversity governance, NGOs gained participation rights they did not previously have in national nature conservation policy-making. The main reasons found for why NGOs are successful in participating on multi-level governance architecture are their long lasting expertise, procedural knowledge and reputation in Hungarian social arena. For acquiring the knowledge about the governance process the cross-scale cooperation between the EU level and national NGOs has been decisive. Access to this kind of information has been important for NGOs to prepare themselves and build the capacities needed for exercising agency. Compared to some other new member states (Slovakia, Czech Republic etc.) Hungarian environmental NGOs were invited by the government to the preparatory process of sites designation. Thus, Hungarian environmental NGOs played an influential role in NATURA 2000 site designation.

NGOs did, however, not succeed to gain understanding for rural development opportunities of Natura 2000, neither with the environmental nor with the agricultural ministry.

5.4 Potentials of Volunteer Involvement in Conservation Site Management. A Finnish Example

Full reference: Santaoja, M., 2010. Potentials for Volunteer Involvement in Conservation Site Management. An Example from Lake Ahtialanjärvi in Finland. In: From Government to Governance? New Governance for Water and Biodiversity in Enlarged Europe. KLUVÁNKOVÁ-ORAVSKÁ, T. et al. 2010. Prague, Alfa Printing. 233 p. ISBN 978-80-87197-28-8.

The study discusses the potentials of volunteer naturalist involvement in conservation site management through an example from Finland: the Ahtialanjärvi lake¹ in the South-Western part of the country. The involvement of volunteer naturalists is considered a novel agency in creating new modes of governance.

Volunteer naturalist is used here to mean people who are not professional biologists or ecologists, but who spend remarkable amounts of time in detailed study of nature and may be the best experts concerning the species of their interest even internationally (Juslén et al., 2008). These volunteer naturalists play many roles in biodiversity governance at various levels from the local to the European: they provide important biodiversity monitoring data for research, planning and conservation, undertake practical restoration works, participate in environmental policy-making and implementation as critics and do educational work on nature.

This case does not represent an immanent conflict, neither is it a best practice example. However, it allows exploring the complex local governance networks and the opportunities and challenges facing volunteer naturalist participation.

The challenges and possibilities for volunteer naturalist engagement in nature conservation can be discussed mainly from two perspectives: the regional environmental administration and the volunteers themselves. Even a very local level case of nature conservation cannot escape the reality European of multi level governance. EU is present in the local governance networks, both enabling and restricting, and usually distant.

¹ the Ahtialanjärvi lake has been recognised as a nationally important bird area (FINIBA) since 1982 and is part of the Finnish Natura 2000 network.

In this study the volunteer naturalists are proposed to be one resource that has not been fully appreciated. Voluntary work has continued on the site with good results but other actors have not been involved much recently. There is lot of potential in involving volunteers in conservation site management, if communication problems and different understandings of aims can be overcome.

Volunteer naturalists can provide new resources for the administration in, e.g., conservation site management, but creating a new kind of co-operation would need a lot of effort from the environmental administration as well before it would start running on its own. On the other hand, investment made now in the form of persons, time and money would pay off later if more volunteer-initiated projects would be running on Natura sites. Thus, the key issue arising from the novel agency for multi-level governance is the absence of legitimacy of volunteers in the existing protection regime and the still prevalent hierarchical governance.

The case of Lake Ahtialanjärvi can demonstrate the potential for expanding the networks of actors for new environmental governance in a multi-level context. The environmental administration could make an experimental showcase of Lake Ahtialanjärvi in finding and trying out new forms of legitimacy for non-state actors such as volunteer naturalists. This can inspire actors all around to “think outside the box” and do something extraordinary for our common environment.

6 The strengths and weaknesses of the novel tools and processes

Environmental governance in Europe has been undergoing massive changes. The changes are effects of increasing human pressure on the environment, climate changes, but also are due to the political process of the European integration. The harmonization of environmental law in the old member states as well the implementation of the environmental *acquis communautaire* in the new member states challenged all governance units. This is in particular related to the growing interest in promotion of shared decision-making in European policy. It implies that the interested parties not only intervene in planning but also become partially responsible for the policy outcomes (Bouwen and Taillieu, 2004). The vertical and horizontal dispersion of the central

government authority, referred to as multi-level governance, resulted in the expansion of a whole range of formal and informal novel tools and processes that connect various state and non-state actors in policy-making.

The implementation of participatory processes has been in particular challenging in the new member states, where political decision-making is still affected by post-socialist relations and massive ongoing institutional changes, oftentimes resulting into inefficient institutional design and over-exploitation of natural resources (Kluvankova-Oravska et al., 2009). The emergence and evaluation of novel processes and tools in multi-level governance of natural resources in Central and Easter Europe is thus a predominant focus of this report.

Several authors discuss criteria of evaluation of participatory processes and tools in environmental governance and natural resource management (Renn et al. 1995; Moore, 1996; Webler et al., 2001). Wittmer et al. (2006) point out that decisions to resolve environmental conflicts have often been oriented to efficiency improvements, cost-effectiveness, and instruments to reach the decisions have been arranged accordingly. However, these criteria do not suffice to distinguish appropriate instruments from those that cannot cope with the complexities. The authors propose a set of new criteria oriented to process legitimacy and information management in order to facilitate the selection of appropriate instruments for decision-making and conflict resolution in natural resource management.

What strikes in the comparison of the presented cases², is that in all cases in the post-socialist countries the participatory processes were initiated in a top-down course of action such as changes in the property rights after the transformation or implementation of the EU directives. Only in the Finnish case the amateur naturalists were involved in the environmental management, although the implementation of the EU Birds and Habitats Directives change the character of their involvement. Regarding the role of complexity and information, the analyzed cases show that the changes and new rules are unclear in some way to most groups of stakeholders and the uncertainty strongly affects stakeholders' attitudes. Although the processes are legitimate, in all cases the processes were characterized by a whole range of informal processes and different interpretations of

² The comparative analysis is only possible when reading the full papers.

formal rules. The social dynamics are closely connected with the role of information and knowledge. In each presented case the groups of stakeholders have different interpretations of the environment and different prescriptions of how to solve the problems and conflicts. This different interpretations cause lack of understanding and communication problems.

7 Conclusions and Policy Implications

The analysis of the novel tools for biodiversity governance provides many important policy implications. The application of experimental methods shows that stakeholders not only care about their own profit and economic performance but that also equity and solidarity in the resource use is essential for them. The experiments show low impacts of sanctions if the rules are imposed from outside and a higher compliance with rules in self-governing regimes. Communication was an important factor allowing formation of the informal, bottom-up rules and taking more responsibility for the decisions (chapter 4.1). At second, market instruments such as labelling, tradable permits, certification, etc., enable active participation of non-state actors and may thus trigger behavioural change for sustainable economy. However, the legal and institutional environment must first define the rules for the market governance. Clear property rights, equal access to information, monitoring, and sanctioning of wrong-doing are preconditions for preconditions for effective implementation of this tool (chapter 4.2).

The analysis of the presented cases on novel processes suggests that an early start of participatory processes can channel conflicts and integrate stakeholders. It is important that the stakeholders develop a common understanding step by step. Involvement of stakeholders at the early stage furthermore enables gradual learning. The discussed cases show that the administration often has a technocratic view of nature and tries to fulfil formal procedures and codes of conducts which are not often disregarded by other stakeholders. Another issue is that the participatory processes are often not truly open to the involvement of the stakeholders and treat the outcomes of the participatory processes not as binding agreements but only as recommendations (chapter 5.1). The evaluation of the cases of novel participatory processes also shows an important role of information and knowledge. Lack of information and lack of understanding of different types of

knowledge (e.g. technical engineering approach vs. ecosystem “soft” approach) posed serious communication barriers (5.2). Finally, the introduction of novel processes and tools might be blocked due to interests of groups of actors who in various ways benefit from the status quo (chapter 5.3 and 5.4). Such power imbalances are oftentimes found in cases where the EU directives introduce new bodies or practices into the national decision-making. The new actors are introduced only formally to fulfil the EU requirements; however, they have only very weak impact on decision-making due to lack of information, exclusion, but also due to lack of financial and physical capabilities.

References

- Bache I, Flinders M. 2004. Multi-level governance: conclusions and implications. In *Mult-level Governance*, Bache I, Flinders M (eds). Oxford University Press: New York, pp 195-206.
- Baker S, 2003. The dynamics of European Union biodiversity policy: interactive, functional and institutional logics. *Environmental Politics*, 12”3, 23-41.
- Baker, S., Eckerberg, K., 2008. In Pursuit of Sustainable Development. New governance practices at the sub-national level in Europe. Routledge /ECPR Studies in European Political Sciences, Abingdon 2008.
- Biermann, Frank. 2007. 'Earth system governance' as a crosscutting theme of global change research. In: *Global Environmental Change* 17 (2007) 326–337.
- Biermann F, Betsill MM, Gupta J, Kanie N, Lebel L, Liverman D, Schroeder H, Siebenhüner B with contributions from Conca K, da Costa Ferreira L, Desai B, Tay S, Zondervan R. 2009. Earth System Governance: People, Places and the Planet. Science and Implementation Plan of the Earth System Governance Project. Earth System Governance Report 1, IHDP Report 20. Bonn, IHDP: The Earth System Governance Project.
- Bouwen R, Taillieu T. 2004. Multi-party collaboration as learning for interdependence in natural resource management. *Journal of Community and Applied Social Psychology* 14: 137-153.
- Commission of the European Communities, 2001. European governance a White Paper. COM (2001) 428 final.
- Čámrová, L., Jílková, J. 2006. Povodňové škody a nástroje k jejich snížení, University of Economics in Prague, Prague;
- GoverNat Proposal 2005. Multi-level Governance of Natural Resources: Tools and Processes for Water and Biodiversity Governance in Europe. Full Project Proposal Call: FP6-2005-Mobility-1

Hooghe L, Marks G., 2003. Unravelling the central state, but how? Types of multi-level governance. *The American Political Science Review* 97:233–234.

Hovik, S., 2008. Governance networks promoting rural sustainable development in Norway. In Baker. S. and Eckerberg, K. 2008. In Pursuit of Sustainable Development. New governance practices at the sub-national level in Europe. Routledge /ECPR Studies in European Political Sciences, Abingdon.

Janssen, M, A., Holahan, R., Lee, A., Ostrom, E. 2010. Lab experiments for the study of social-ecological systems. *Science* , Vol. 328, 613-617.

Juslén, Aino; Kuusinen, Mikko; Muona, Jyrki; Siitonen, Juha ja Toivonen, Heikki (eds.), 2008. Puutteellisesti tunnettujen ja uhanalaisten metsälajien tutkimusohjelma – PUTTE loppuraportti. Suomen ympäristö 1/2008. Ympäristöministeriö.

Jordan A., 2008. The governance of sustainable development: taking stock and looking forwards. *Environment and Planning C: Government and Policy* 26: 17–33.

Klůvanková-Oravská, T., Chobotová, V., Banaszak, I., Trifunovová, S., Slaviková, L. 2009. From Government to Governance for Biodiversity: The Perspective of Central and East-European Transition Countries. *Environmental Policy and Governance*, Vol. 19.

Klůvanková-Oravská, T. et al. 2010. From Government to Governance? New Governance for Water and Biodiversity in Enlarged Europe. Prague, Alfa Printing. 233 p. ISBN 978-80-87197-28-8.

Marks G, 1993. Structural policy and multilevel governance in the EC. In: The state of the European Community. Carfuny A, Rosenthal G (eds.), Vol.2. The Maastricht debates and beyond.

Marks, G., Hooghe, L. 2004. Contrasting Visions of Multilevel Governance. In: Bache I., Flionders, M., Multilevel Governance, Oxford University Press

Ministry of Agriculture, 2005. Metodický návod odboru vodohospodářské politiky Ministerstva zemědělství a odboru ochrany vod Ministerstva životního prostředí pro postup pořizovatelů plánů oblastí povodí a dalších subjektů podílejících se na procesu plánování v oblasti vod v roce 2005, on-line: http://www.mze.cz/attachments/Metodicky_navod_plan_2005.pdf, 20. 5. 2008

Moore, S.,A. 1996. Defining “Successful Environmental Dispute Resolution”: Case Studies from Public Land Planning in the United States and Australia. *Environmental Impact Assessment Review* 16: 151-169

Moss, T. 2004. The Governance of Land Use in River Basins: Prospects for Overcoming Problems of Institutional Interplay with the EU Water Framework Directive. *Land Use Policy* 21: 85-94

Mullan, K., Kontoleon, A., 2008. Benefits and costs of forest biodiversity: Economic theory and case study evidence. Final report, July 2008.

Muradian, R., Corbera, E., Pascual, U., Kosoy, N., May, P. H., 2010. Reconciling theory and practice: An alternative conceptual framework for understanding payments for environmental services, *Ecological Economics*. 69: 1202-1208.

- Muro M. 2006. Pilohtafte Ermittlung und Analyse von Zielgruppen für die Information und Anhörung der Öffentlichkeit nach Art. 14 EG Wasserrahmenrichtlinie in einer Flussgebietseinheit. Umweltbundesamt, Texte 27/06. http://www.landschaftsoekonomie.tu-berlin.de/fileadmin/a0731/uploads/publikationen/edocuments/UBA_Texte_27-06.pdf, 2. 1. 2008
- Nunes, P.A.L.D., Riyanto Y.E. 2005. Information as a regulatory instrument to price biodiversity benefits: certification and ecolabeling policy practices. *Biodiversity and Conservation* **14**: 2009–2027
- Ostrom V, Tiebout C, Warren R., 1961. The organization of government in metropolitan areas. *American Political Science Review* **55**: 831–842.
- Ostrom E, Burger J, Field CB, Norgaard RB, Policansky D. 1999. Revisiting the commons: local lessons, global challenges. *Science* **284** : 278-282.
- Ostrom E., 1998. A Behavioral Approach to the Rational Choice Theory of Collective Actions. *American Political Science Review* **92**, No:1, 1-22.
- Paavola J, Gouldson A, Kluvankova-Oravska T., 2009. The institutions, ecosystems and the interplay of actors, scales, frameworks and regimes in the governance of biodiversity. *Environmental Policy and Governance* **19**, 148-158.
- Pascual, U., Muradian, R., Rodríguez, L.C., Duraiappah, A., 2010. Exploring the links between equity and efficiency in Payments for Environmental Services: a conceptual framework. *Ecological Economics* **69**: 1237-1244.
- Povodí Moravy, 2008. Strategie zapojení veřejnosti a uživatelů vody do procesu plánování pro oblast povodí Dyje, on-line: http://www.pmo.cz/2005/Strategie/Dyje/Strategie_D.doc
- Renn, O., Webler, T., Wiedermann, P. 1995. Fairness and Competence in Citizen Participation. Dordrecht: Kluwer
- Rhodes RAW., 1996. The new governance: governing without government. *Political Studies* **44**: 652–667.
- Rowe G, Frewer LJ. 2000. Public Participation Methods: A Framework for Evaluation. *Science, Technology & Human Values* **25**/1: 3-29
- Rosenau J., 1992. Governance, order and change in world politics. In *Governance Without Government*, Rosenau J, Czempiel E-O (eds.). Cambridge University Press: Cambridge; 1–29.
- Rosenau J., 1997. Along the domestic –foreign frontier. Exploring governance in a turbulent world. Cambridge University Press: Cambridge.
- Scharpf, F. 1997. Games Real Actors Play: Actor-centered Institutionalism in Policy Research. Oxford. WestView Point

Schmitter P., 1996. Examining the present Euro-polity with the help of past theories. In *Governance in the European Union*, Marks G, Scharpf

Schmitter P., 2000. How to democratise the European Union... and why bother? (Boulder, Col: Rowman and Littlefield).

Stoker G., 1998. Governance as theory: five propositions. *International Social Science Journal* **50**(155): 17–28.

Vatn, A., 2010. An institutional analysis of payments for environmental services. *Ecological Economics* 69: 1245-1252.

Webler, T., Tuler, S., Krueger, R. 2001. What is a Good Public Participation Process? Five Perspectives from the Public. *Environmental Management* **27**(3): 435-450

Williamson, O. E., 1979: Transaction Costs Economics: the Governance of Contractual Relations. *Journal of Law and Economics* 22, pp. 233-261.

Williamson, O. E., 1991: Comparative Economic Organization: The Analysis of Discrete. *Administrative Science Quarterly* 36 (2), pp. 269-296.

Wittmer, H., Rauschmayer, F., Klauer, B. 2006. How to Select Instruments for the Resolution of Environmental Conflicts? *Land Use Policy* 23(1): 1-9

Zikos D., Kluvánková-Oravská T., Sláviková L. Experiments on Common Pool Resources: Innovative Tools Providing Multi-dimensional Insights. Experiences from Three New EU Member States. In: KLUVÁNKOVÁ-ORAVSKÁ, T. et al. 2010: From Government to Governance? New Governance for Water and Biodiversity in Enlarged Europe. Prague, Alfa Printing. 233 p. ISBN 978-80-87197-28-8.