

**ADMINISTRATION OF PROTECTED
AREAS IN ROMANIA: INSTITUTIONAL
CAPACITY AND EUROPEAN
INTEGRATION**

Abstract

Nature conservation is the second environmental priority at global level. Romania has an outstanding biodiversity at European and global level and its environmental policy mirrors, at least in the last years, the global perspective. The paradigm shift in nature conservation and ambitious goals set by the European environmental policy gave an important impetus in this area. The paper aims to give insights on how the main nature conservation tool – protected areas – is applied in Romania. In this respect there are analyzed the institutional capacity and the European integration process by considering the legal framework, respectively the funding of nature conservation projects. Out of the twelve ecosystem approach principles, decentralization of decision at local level is the most important change to be noticed, while as long as economic context is regarded the main source of income remain public funding by specialized programs.

Keywords: biodiversity, protected areas, institutional capacity, European integration

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**ADMINISTRAREA
ARIILOR PROTEJATE ÎN
ROMÂNIA: CAPACITATE
INSTITUȚIONALĂ ȘI
INTEGRARE EUROPEANĂ**

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Rezumat

Conservarea naturii este a doua prioritate de mediu la nivel global. România are o biodiversitate remarcabilă la nivel european și global, iar politica de mediu reflectă, cel puțin în ultimii ani, perspectiva globală. Schimbarea de paradigmă în conservarea naturii și obiectivele ambițioase stabilite de politica de mediu europeană au reprezentat un stimulent important pentru acest domeniu. Lucrarea urmărește să furnizeze informații asupra modului în care principalul instrument de conservare a naturii – ariile protejate – este folosit în România. În acest sens sunt analizate capacitatea instituțională și procesul de integrare europeană ținând cont de cadrul legal, respectiv de finanțare proiectelor de conservare a naturii. Din cele doisprezece principii ale abordării ecosistemice, descentralizarea deciziilor la nivel local este cea mai importantă schimbare care poate fi observată, în timp ce referitor la contextul economic principala sursă de venituri sunt fondurile publice gestionate de programe specializate.

Cuvinte cheie: biodiversitate, arii protejate, capacitate instituțională, integrare europeană.



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1. INTRODUCTION

Preserving biodiversity is one of the most challenging environmental issues. There are several reasons that transformed this goal in the second most important environmental topic at global level (Bran, 2009). These include the continuous growth of biodiversity loss rate, impact of climate change, disruption of ecosystem services that support human well-being by irreversible changes in ecosystems' structure and functioning (Dinca et al., 2013).

In Romania, nature conservation has a long history that resulted in the establishment of numerous protected areas. The struggle to align with the European environmental goals busted this environmental sector in various ways (Ioan et al., 2010). The transformation became more intense after Romania's adhesion to the European Union (EU) and consisted in increasing the area prone to conservation and funding of projects with biodiversity preservation goals (NEPA, 2010).

Fact is, by the end of the 2007-2013 financial planning period almost one hundred projects were financed and many protected areas are managed on contract basis by non-governmental organizations (NGOs) or other local organizations. What is the structure of funding by types of projects, what types of funds were accessed and what types of organizations are now responsible with protected areas' management are important questions to be answered for enabling this priority environmental sector to improve in using the opportunities of European integration.

2. ROMANIA'S NETWORK OF PROTECTED AREAS

Among EU Member States (MS), Romania's natural heritage is outstanding. Large areas of undisturbed ecosystems, including virgin forests and wetlands, good representation of large carnivore populations (thousands of individuals for many species), biodiversity hotspots, a balanced structure of habitats developed on three major relief types (mountain, hills and plateaus, and plains), and the representation of five bio-geographic regions (continental, alpine, steppe, Pannonian, and pontic) are only few patterns of the biodiversity richness occurring in Romania.

The network of protected areas covers around 4.75 million hectares, representing 20% of Romania's territory. This is made up by many types of protected areas that are different one from another by the pursued goals being organized according to IUCN categories, multilateral and European biodiversity goals assumed by Romania within various agreements. The most important part of the network is made up by natural parks (16), national parks (13), biosphere reserves (3), and Natura 2000 sites: 382 special

areas for habitat and species conservation (ROSCI) and 148 special areas for the conservation of bird species (ROSPA).

Last years' main change is the establishment of Natura 2000 sites for both Birds and Habitats directives. Their size varies between wide ranges from several hectares (ROSCI0234 Stanca-Stefanesti with 1 hectare) and hundreds of thousands of hectares (ROSPA0031 Delta Dunarii si Complexul Razim-Sinoie with 512.8 thousand hectares). Parts of these sites are overlapping between them and also with previously established protected areas. ROSCIs cover 4.13 million hectares, while ROSPAs cover 3.69 million hectares.

Despite the expansion of the Natura 2000 network, in Romania still remained many natural areas that are relatively well preserved and that are not comprised in the network and could play an important role as corridors. Furthermore, many agricultural areas, especially in the hill and plateau relief are cropped traditionally and outlined by strips of bushes that could act as stepping stone habitats for many species (Andreica et al., 2013).

On the other hand, the establishment of Natura 2000 sites occurred in many cases in areas that have no history in nature preservation, their resources being utilized in various economic activities. For instance, Natura 2000 sites are often represented by riverbanks and rivers that are used for gravel extraction, hydropower, fishing, waste disposal etc. (Petrescu-Mag and Petrescu, 2010) Such situation illustrates that although there are many wild ecosystems their preservation will be challenging for the organizations that committed themselves to establish and implement management plans.

Protected areas are considered a valuable tourism attraction that could bust economic activities to support local development and funding (Candea and Bogan, 2013). Nevertheless, even national parks are of little interest for most of the domestic tourists. Natura 2000 sites are a novelty yet and most of the population is not aware about their existence and goals.

3. INSTITUTIONAL CAPACITY FOR THE ADMINISTRATION OF PROTECTE AREAS

Nature conservation entered a new era after 2000 then at Nairobi the Conference of the Parties for the United Nations Framework Convention for the Conservation of Biological Diversity adopted the principles of ecosystem approach. These principles (box 1) express a novel paradigm, outlined by holistic approach, harmonization of preservation and sustainable use goals and adaptive management.

Box 1. Principles of ecosystem approach

- Principle 1. The objectives of management of land, water and living resources are a matter of societal choice.
- Principle 2. Management should be decentralized to the lowest appropriate level.
- Principle 3. Ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems.
- Principle 4. Recognizing potential gains from management, there is usually a need to understand and manage the ecosystem in an economic context. Any such ecosystem-management program should: a) Reduce those market distortions that adversely affect biological diversity; Align incentives to promote biodiversity conservation and sustainable use; and internalize costs and benefits in the given ecosystem to the extent feasible.
- Principle 5. Conservation of ecosystem structure and functioning, in order to maintain ecosystem services, should be a priority target of the ecosystem approach.
- Principle 6. Ecosystems must be managed within the limits of their functioning.
- Principle 7. The ecosystem approach should be undertaken at the appropriate spatial and temporal scales.
- Principle 8. Recognizing the varying temporal scales and lag-effects that characterize ecosystem processes, objectives for ecosystem management should be set for the long term.
- Principle 9. Management must recognize that change is inevitable.
- Principle 10. The ecosystem approach should seek the appropriate balance between, and integration of, conservation and use of biological diversity.
- Principle 11. The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.
- Principle 12. The ecosystem approach should involve all relevant sectors of society and scientific disciplines.

Source: Ioan, Bran and Radulescu, 2010.

One major change brought in by the paradigm shift in nature conservation is that the management of protected areas should be decentralized at local level (Vindigni and Peri, 2013). In the current environmental policy of Romania this is reflected in the regulation framework for protected areas management that allows to various organizations to be involved in the administration of protected areas on contract basis for three or five years (Order no 1948/2010).

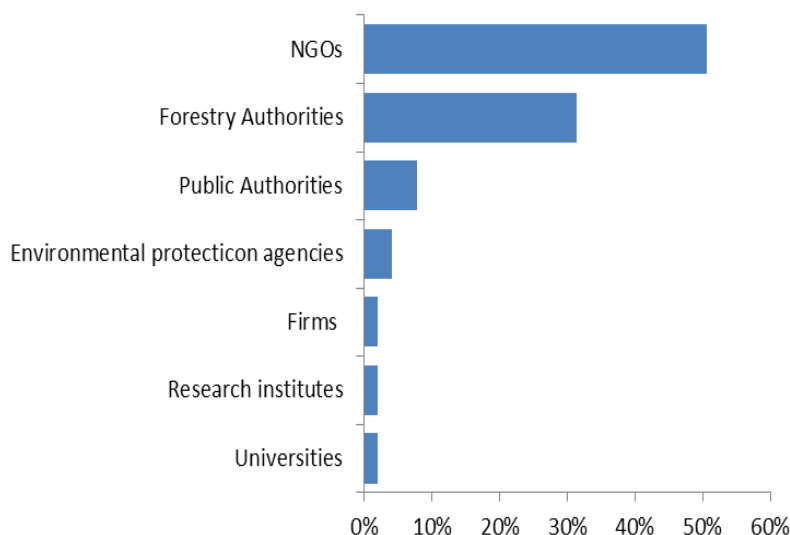


FIGURE 1 - STRUCTURE OF PROTECTED AREAS' ADMINISTRATORS

Source: authors own representation using data provided by the Minister of Environment and Climate Change

Since 2010 there were organized four sessions that resulted in almost three hundred contracts. The structure of administrators by their characteristics (figure 1) indicates that non-governmental organization (NGOs) are prevalent, half of the contracts being signed by such organizations.

Other well represented category is forestry authorities, which account for almost a third of the contracts. This pattern is not surprising since most the protected areas are included in the national forestry area and forestry authorities are responsible with the management of the forests included in these areas. Other organizations that assumed the role of administrators are public authorities, environmental protection agencies, universities, research institutes, and private firms.

4. EUROPEAN INTEGRATION BY FUNDING OF PROTECTED AREAS

Protected areas administration is not only a challenging managerial task, but also very demanding in terms of resources. Since in Romania the novel ecosystem management paradigm in an early stage, very few protected areas' administrators are able to generate their own incomes and even if they do so these incomes are too small to cover the funds needed for an adequate management. Therefore there were established support programs that are funding projects of administrators to help them to achieve the ambitious goals of EU in biodiversity preservation.

The support programs that provide the most important funding opportunities are the Sectorial Environmental Operational Program (SEOP) and the LIFE program. Other funding opportunities are EEA grants and social responsibility programs of companies.

SEOP proved to be the most attractive of the funding programs since it covers almost entirely the costs of project implementation by a combination of European and national financial resources. In this program there were organized five sessions of project competition, the last one being yet to be completed.

Based on the data available for the first four sessions it is possible to draw several conclusions. The total value of projects is almost 600 million lei, one average project being of 6 million lei. The largest project worth 71 million lei granted for the Local Council of Tulcea for the project of Ecological restoration for the Zaghen polder from the cross-border biosphere reserve Danube Delta Romania/Ukraine, while the smallest one used no more than 114 thousands lei for a management plan of a small Natura 2000 site.

The total value of projects varied from one year to another with a significant increase from 2009 to 2010 (figure 2A). The number of projects and the average value of a project in each year evolved respecting the same pattern (figure 2B). Thus most of the projects were contracted in 2010 for more than 200 million lei, representing one third of the funding and almost half of the projects.

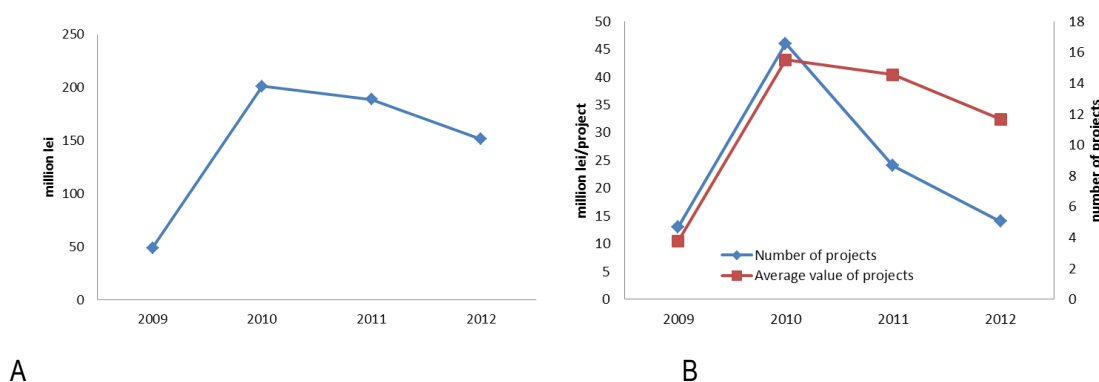


FIGURE 2 - EVOLUTION OF PROJECTS TOTAL VALUE, NUMBER AND AVERAGE VALUE
Source: authors own representation using AM POS Mediu data

The average value of the projects grew more than four times from 3.8 million lei in 2009 to 15.5 million lei in 2010, and remained relatively high, but decreasing in the next years. Meanwhile the number of projects climbed from 13 in 2009 to 46 in 2006, but fall back in 2012 to 14 projects.

Out of the total, 16 projects have budgets over 10 million lei and their value represents 75% of the total value of the projects. The top ten projects exceed 15 million lei (figure 3).

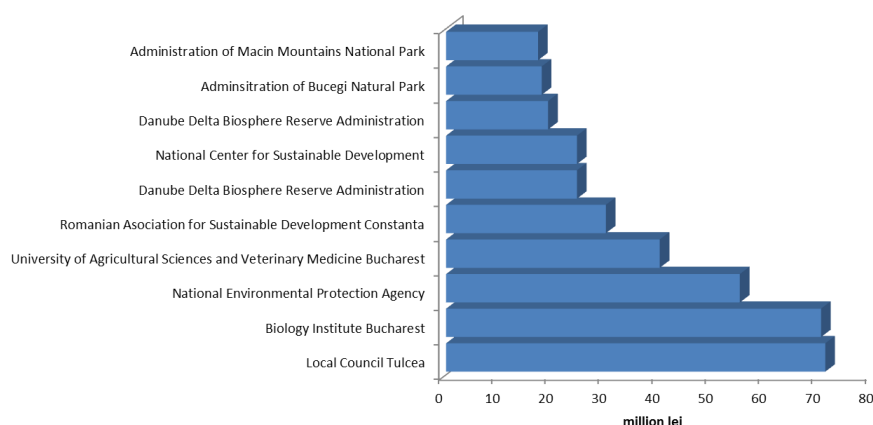


FIGURE 3 - BENEFICIARIES OF TOP TEN SEOP PROJECTS
Source: authors own representation using AM POS Mediu data

Several large projects focus on priority issue within one of the largest and most valuable protected area of Romania – the Danube Delta (DD). They are implemented by the administration itself or by organizations such as the University of Agricultural Sciences and Veterinary Medicine Bucharest or local councils of Mahmudia and Tulcea. Considering the fact that there are also other smaller projects implemented in the same area, it could be stated that more than one third of this funding is invested for the preservation and/or restoration of Danube Delta's ecosystems. In addition, other large projects could be found in Macin Mountains National Park and Balta Mica a Brailei Natural Park, which are protected areas situated very close to the DD. In other terms, the distribution of funds is quite uneven and it tends to reflect more the value of the biodiversity than the area that is protected. Thus DD concentrates more than half of the species to be found on Romania's territory (5000 species out of more than 8000 species), while its surface represents around 10% of the protected areas of Romania.

Other large projects are in fact national projects that target improving the awareness regarding the Natura 2000 network and improving the monitoring system and other managerial tools needed at national level.

For instance, the monitoring of species and habitats according to Habitats (article 17), respectively Birds (article 12) directives is supported by the projects of the Biology Institute Bucharest (70 million lei), respectively National Centre for Sustainable Development (24 million lei), while the National Agency for Environmental Protection implemented a 55 million lei worth projects for increasing the awareness regarding Natura 2000 in Romania.

Another important funding source is the European LIFE+ program by its Nature component. In Romania, the LIFE Nature component (now called Nature and Biodiversity) has co-financed 38 projects.

These projects represent a total investment of 128 million lei, of which 79 million lei was contributed by the EU. The average size of the projects is of 3.4 million lei. Completed projects focused mainly on habitat restoration (alpine and sub-alpine forests and wetland habitats), but also on the conservation of certain species (large carnivores, bats, the meadow viper, dolphins, birds). Parks, national and regional authorities, and research institutions accounted for nearly 80% of the project beneficiaries. Other types of beneficiaries included development agencies, NGOs, universities and local authorities.

There are 14 ongoing Nature projects under the LIFE+ program that focus mainly on the conservation of habitats (Semenic and Calimani-Gurghiu mountains, the Lower Prut Floodplain, Danube islands, the small island of Braila and pastoral ecosystems, forest and aquatic habitats in the Upper Dambovit Valley, degraded habitats of the "Nordul Gorjului de Vest" Natura 2000 site, and eutrophic marshes from Prejmer and Harman) and species (the Ursinii viper, brown bear in the Eastern Carpathians, the lesser spotted eagle, bats, pygmy cormorant and ferruginous duck at key sites in Romania and Bulgaria). The beneficiaries include regional authorities, NGOs, a training center and a park authority.

CONCLUSIONS

The environmental challenge for Romania became very realistic as the ambitious European targets were assumed. Biodiversity preservation is amongst the most challenging goals since its accomplishment implied an important shift in the management of protected areas. The progress in this direction was examined by considering administration and funding.

Institutional capacity building is supported by the legal framework, although its implementation is still in an early stage. Nevertheless, there are enclosed almost three hundred administration contracts. Half of the contractors are environmental NGOs, fact that could be interpreted as favorable, although their novelty in the field and possible dependence on public funding by projects could hinder the ability to stick with the ambitious goals of the fore coming management plans.

SEOP and LIFE Natura are the main sources of funding for projects that pursue biodiversity preservation goals, most of them being represented by the elaboration of the management plan for one or a group of protected areas. More than 600 million lei were allocated for almost 100 hundred projects contracted since 2009 to 2012. The average size of the project is around 6 million lei for SEOP and 3.4 million lei for LIFE Natura, but in the second case most of the projects are close to the mean, while in case of SEOP the project budgets are very different. From a territorial perspective, it could be stated that the funding is concentrated where the biodiversity finds its outmost. Important issues such as

perfecting and implementing monitoring according to the provisions of Habitats and Birds directives are about to be overcome by major national projects.

The main outcome of this stage should be an improved managerial capacity, underpinned by management plans elaborated in accordance with the current state and value of the biodiversity in each protected area. For now, only very few of these plans were perfected and approved and only after their implementation starts could and should be performed assessment studies to reveal at what extent the novel ecosystem management paradigm is able to improve the conservation of Romania's rich biodiversity.

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