# Analysis of the capacity development needs of staff engaged in Montenegro protected areas system

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## Abstract

This paper aims to analyse capacity development needs of protected area staff in Montenegro protected areas system (MPAS). The empirical results drown from four years implementation of the projects ,,Strengthening protected areas system in Montenegro" and "Strengthening financial sustainability of protected areas in Montenegro", financed by Global Environment Fund (GEF) and implemented by UNDP, have great contribution in terms of specific conclusions and broad range of recommendations for further development of MPAS. Methodological approach is based on capacity building needs qualitative assessments and resulting training programs. There are important conclusions drawn from analysis of the results achieved. Capacity development should be focused on rationally identified needs, appropriate to the participants, professionally designed, delivered and assessed, and is affordable and sustainable. Protected area (PA) managing institutions should have capacity development plans and priorities with allocated budgets for this purposes. Information and data management should be integral part of operations of protected areas management. Training in biodiversity conservation should focus on management oriented skills rather than academic studies. The focus should be on developing, applying and monitoring the impact of specific measures designed to achieve the defined conservation goals of protected areas.

Keywords: management, protected area, capacity development, Montenegro

### Introduction

Protected areas – national parks, local level and national level protected areas, community conserved areas, nature reserves are cornerstone of biodiversity conservation, while at the same time significantly contributing to people's livelihoods, particularly at the local level. Protected areas are at the core of efforts towards conserving nature and the services it provides us – food, clean water supply, medicines and protection from the impacts of natural disasters (Watson J.E.M at all, 2014).

As per International Union for Conservation of Nature (IUCN) definition from year 2008: "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". The first draft of this definition was created in 2007 and since then there have

been several revisions and changes made by numerous IUCN experts and the World Commission on Protected Areas (WCPA) in order to be accepted in its final version World Congress of Conservation Congress in Barcelona in 2008.

Further on, IUCN provides classification of protected areas according to their management objectives:

In Strict Nature Reserve: Category Ia are strictly protected areas set aside to protect biodiversity and also possibly geological/geomorphical features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values. Such protected areas can serve as indispensable reference areas for scientific research and monitoring;

Ib Wilderness Area: Category Ib protected areas are usually large unmodified or slightly modified areas, retaining their natural character and influence without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition;

Il National Park: Category II protected areas are large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible, spiritual, scientific, educational, recreational, and visitor opportunities;

III Natural Monument or Feature: Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value;

IV Habitat/Species Management Area: Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many Category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category;

V Protected Landscape/ Seascape: A protected area where the interaction of people and nature over time has produced an area of distinct character with significant, ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values;

VI Protected area with sustainable use of natural resources: Category VI protected areas conserve ecosystems and habitats together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area;

Although not entirely aligned with Montenegro legislation and its categorization, these definitions are best illustration of intended results of management practices for protected areas applicable worldwide.

Montenegro followed the global trends of last few decades in expansion of protected areas, geographically and conceptually. In last two years protected areas in Montenegro increased from some 9% of Land surface to current 11.6%. At this point Montenegro did not proclaimed any marine protected areas.

Any national strategic document reinforces commitment to global trend of growth of protected areas. In parallel protected areas are now created not only to conserve landscapes and to provide habitat for endangered species, but are considered as important possibility for improvement of the livelihood of local communities through tourism revenues or sustainable use of natural resources, adaptation to climate change, among many other functions. These new functions and opportunities are addition to, not a replacement for existing ones. This means that protected areas managed in a modern way and incorporating functions mentioned above could face necessary trade-offs between competing objectives.

Within this context, it is crucial to monitor and understand management effectiveness of a protected areas system in order to secure achievement of the primary goal for which protected areas are established: the conservation of biological diversity. Because resources for conservation are limited, it is important to identify conservation approaches and management capacities that are most likely to provide results for conservation work.

When discussing protected areas in Montenegro it is of special importance that Montenegro has been declared an "ecological state" (Article 1 of the Constitution of the state of Montenegro) and in this way the highest priorities are given to its natural resources. For the purpose of an adequate managing and protection of natural resources, the Law on Nature Protection defines natural resources that fall under the protection of the state as:

- Protected sites strict and special nature reserves, national park and nature park, nature monument, protected habitat and pedio of exceptional features,
- Protected species of plants, animals and fungi strictly protected wild species and protected wild species;
- Protected geological and paleontological objects.

According to the Law on National Parks there are five national parks in the territory of Montenegro: "Biogradska gora", Durmitor "," Lovćen "," Skadar Lake "and" Prokletije ". In addition to the National Parks, over 60 protected areas are separated and protected within the categories:

- Nature Reserves,
- Monuments of nature gorge, caves, pits, plant communities, individual dendrological objects, beaches, city parks, memorial parks, botanical reserves, botanical gardens,
- Areas of special natural features
- Areas protected by municipal decisions

In 2015 two new protected areas: Park of nature Piva and Park of nature Komovi increased the territory under protection. Proclamation process was supported by the projects ,,Strengthening protected areas system in Montenegro" and ,,Strengthening financial sustainability of protected areas in Montenegro", financed by Global Environment Fund (GEF) and implemented by UNDP. Current protected area system in Montenegro is shown in Table 1.

Protected area	number	Land surface	Marine surface	Total coverage
Nature reserve	3	420 ha	0.00 ha	420 ha
National Park	5	100,427 ha	0.00 ha	100,427 ha
Special nature reserves	1	150 ha	0.00 ha	150 ha
Park of nature	2	48.169.9 ha	0.00 ha	48,169.9 ha
Monuments of nature	56	11,032.9 ha	0.00 ha	11,032.9 ha
Areas of special natural features	2	193 ha	0.00 ha	193 ha
Total	69	160,392.9 ha 11.6% MNE	0.00 ha 0 % CG	160,392.9 ha 9.9% MNE

Table 1. Overview of the current protected area system in Montenegro.

In addition to Constitution, legislation regulating the protection of natural values and natural attractions is primarily regulated by the Nature Protection Act and by Law on National Parks, Marine Law, Law on Forests, Law on Wildlife and Hunting and Biodiversity strategy with action plan.

The Nature Conservation Act defined measures for the protection of nature as a whole, and in particular the protection of the area of special natural values, natural sights and natural rarities that are of special importance due to the health, culture, educational, educational, historical, aesthetic and touristic-recreational values.

The Environmental Law defines the basic principles of environmental protection defines categories of natural goods which, as areas of interest to the Montenegro, enjoy special protection: 1) Nature Reserve, 2) National Park, 3) Protected plant and animal species, 4) Nature Monument, 5) Park of Nature and 6) the area of special natural features.

The Law on National Parks defines that national parks are areas of exceptional and multiple natural values that have ecological, economic, scientific, historical, aesthetic, cultural, educational and recreational function. The law defined the manner and conditions for the implementation of the protection of national parks, procedures and conditions for the adoption of documents on the basis of which the management of national parks, the authorization system, the provision of compensation and the type of records are carried out.

The Forest Law treats forests as a natural wealth of general interest so that the use is carried out under certain conditions which ensure the permanent preservation and enhancement of their natural values and ecological functions.

Law on game and hunting - in the meaning of this law, hunting includes the cultivation, protection, hunting and use of game, as a good of general interest. The game enjoys special protection and is used under the conditions and in the manner prescribed by this law. Protection and breeding of game is an activity of general interest and is in the function of protection and improvement of the environment.

In this document team examines and identifies priority capacity development needs to be addressed in order to secure improved and sustainable management of Montenegro's protected areas system. Management efficiency assessments prepared during implementation of "Strengthening protected areas system in Montenegro" and "Strengthening financial sustainability of protected areas in Montenegro", financed by Global Environment Fund (GEF) and implemented by UNDP are used as input for preparation of this document, as these assessments focused on Montenegro system performance. We evaluate these findings in the context of a wider body of evidence relating to the problem of determining protected area management performance.

While significant number of papers are addressing issues related to improved management efficiency and capacity building needs for protected areas system worldwide intention of this document is to draw attention to those that are applicable in Montenegro context and relevant for Montenegro protected areas managers. The document reiterates the need for urgent reaction from relevant protected management authorities for securing adequate management of existing and future protected areas.

As presented in number of recent studies evaluating potential and existing economic benefits from protected areas in Montenegro, protected areas system is already providing significant economic benefit for the county through number of provided ecosystem services. Namely, the value of tourism and recreational activities, other uses of protected areas lands and resources, water supply services and watershed/flood protection services is estimated at just under €68 million in 2010. This resulted in the quantified value of protected areas equating to some 2.2% of GDP, or economic benefits of €106 generated per capita of Montenegro's population (Emerton L. 2011). Grasslands and forests are of extreme importance for provision of ecosystem services (Nemec, P. at al. 2015). Despite significant contribution to countries economy, biodiversity values and contribution are still unaccounted and no legal or institutional architecture that is required to enable, support and deliver on the vision of payment for ecosystem services is articulated in the concept or strategy document (Emerton L. 2013).

Overall assessment of financial management capacities, focusing on enabling environment, organizational structure and individual level capacities, concluded that significant improvement in are needed (Dakovic Tadic M., 2014). Assessment concluded that protected area management should assume more active role in monitoring of implementation of Management plans at site level, including quality control of monitoring and reporting; actively engage with civil society and local population and business; develop more targeted awareness rising campaigns and have more focused budget planning and fundraising activities. Furthermore, management should focus on more structured work planning; securing adequate incentive system (in particular non-monetary incentives) and introduce client and partner feedback mechanisms.

Training system should be established particularly focusing on strategic planning, project management, management practices, training delivery.

Capacity development scorecard for protected areas system in Montenegro (Vugdelic M. 2012 – 2015) as well as part of "Assessment Of Capacity Development Needs Of Protected Area Staff In Eastern Europe" (Michael R.A. at al, 2013) identified need for more systemic approach in capacity building efforts in order to maximise effects of training programs.

While these might seem as country specific challenges and opportunities, it is important to understand that these are common in countries in the region as well as

globally (Leverington F. at all, 2010). Many countries with high biodiversity values are facing severe lack of management capacities and inadequate financial resources (Mancheno C.S.M at all, 2013). These challenges lead to increased international cooperation and information exchange as well as to increased funding opportunities for solving part of the existing problems.

Precondition to tap into this available resources is clear understanding of protected areas managers' roles and responsibilities and securing needed capacities for implementation of expected protected areas functions.

#### Material and Methods

Montenegro protected area system management efficiency was subject of number of assessments over last 5 years. Part of these assessments where done as part of overall assessments of environmental sector performance as part of EU accession process, while limited number of assessments specifically targeted performance of protected areas managers. Management efficiency assessments prepared during implementation of ,,Strengthening protected areas system in Montenegro" and ,,Strengthening financial sustainability of protected areas in Montenegro", financed by Global Environment Fund (GEF) and implemented by UNDP are used as input for preparation of this document, as these assessments are focused Montenegro system performance. We evaluate these findings in the context of a wider body of evidence relating to the problem of determining protected area management performance.

Team undertook an overview of documents and information available in electronic form in English and local language, on the institutional framework and the management of protected areas, capacity building practices and good example cases. In this respect, policies, laws, governance structures, economics and examples of sustainable development in protected areas, financing, guidelines and guides for protected areas are reviewed. Historical and development contexts, strategies, individual examples and best practice were analysed.

An overview and review of local and national documents in Montenegro on protected areas was undertaken through analysis of: plans, strategies, reports, laws and regulations, and numerous drafts and unpublished documents (Ćirović R. at al, 2014).

Analyses - Based on the principles of good governance, the current situation and trends of the development of protected area systems in Montenegro have been considered (Katnic A. at al, 2014).

Discussions - A series of semi-structured discussions with decision-makers and relevant stakeholders as part preparation of annual Capacity development scorecard for protected areas system in Montenegro as well as part of "Assessment Of Capacity Development Needs Of Protected Area Staff In Eastern Europe" were used.

Over a period of years 4 (2012-2015) Capacity development scorecard for protected areas system was developed (Vugdelic M. 2012 – 2015). The assessment focused on capacity development indicators are measuring the individual, organizational, and systemic levels, in order to track project implementation progress. The results complemented and served as an input for preparation of assessment Of Capacity Development Needs Of Protected Area Staff In Eastern Europe – Montenegro component (Vugdelic M., Vulikic B. 2013).

Interviews involved heads of different departments within the protected area management bodies, local governments and line ministries representatives, in total more than 40 different stakeholders.

Country specific recommendations are relying on analysis prepared for capacity development needs of protected area staff in eastern Europe (Michael R.A. at al, 2013) and assessment of capacity development needs of protected area staff for Montenegro (Vugdelic M., Vulikic B. 2013).

#### Results

Based on a literature review and combined with our experience working with protected areas management we concluded that the identification of specific knowledge needs with respect to management of protected areas needed to be conducted. We believed such an effort had great potential to contribute to Montenegro conservation efforts. Therefore, in this paper we focused on identifying the knowledge needs of managers of protected area systems. In addition, we sought to identify the barriers that constrain the acquisition of this needed knowledge and management.

During preparation of annual Capacity development scorecard for protected areas system in Montenegro as part of implementation of the projects "Strengthening protected areas system in Montenegro" and "Strengthening financial sustainability of protected areas in Montenegro" project team repetitively identified expertise lacking among PA staff in areas such as planning principles, research, monitoring and evaluation techniques, leadership and decision-making, visitor management, conflict resolution and stakeholder involvement, fundraising, outreach and partnership development, and the ability to account for characteristics of local populations in management decisions.

This deficiency motivated us to explore the knowledge needs of conservation professionals and develop capacity building programs that were initiated in the past few years, aiming at the PA staff in Montenegro. All of them were initiated as parts of the capacity building component within the framework of a GEF-funded UNDP project in Montenegro, called: "Strengthening the Protected Area System in Montenegro".

In addition to *ad hoc* trainings organized as part of projects activities a more systemic and long term approach was undertaken by development of:

- Postgraduate Masters programme "Protected Areas and Rural Development"

   initiated in 2011. The program enrolled two generations. The first generation included 7 National parks employees (all from the staff category Mid-level Managers/Professional Staff). Programme is interdisciplinary, and covers subjects such as Basics of Biodiversity, Environmental Law, Environmental Economics, PAs and Rural Development, Project Management, Environmental Impact Assessment etc. This programme is organised by University Donja Gorica in Podgorica.
- Postgraduate Specialist course "Protected Area Management" This programme is offered by University Mediteran in Podgorica. It has two orientations – Management of National and Regional Parks and Management of Urban Heritage, and both are interdisciplinary involving subjects such as Environmental Law, PR, Marketing, Management of PAs, Financial Management, IT in the Environment etc.

Standardisation of the ranger profession in Montenegro (Vugdelic M., Vulikic B. 2013)Together with the national Centre for Vocational Training, a set of professional standards for a PA ranger was established, and a training programme set up. The training programme covers all the topics relevant for the ranger profession –basic ecology, field survey and monitoring skills, law enforcement, communication with stakeholders, visitors' management, guiding and interpretation etc. University Donja Gorica is the only accredited organization delivering trainings in line with standardized program.

#### Discussion

Despite many efforts invested in setting up programs developed for protected areas management current situation in Montenegro is that there is no strategic or planned capacity building programmes carried out for protected areas staff. All the training events that took place in the past few years were on an ad hoc basis, and driven by the external subjects who provided financial support for such initiatives. Protected area management allocates very modest finances towards further staff education, and those are not spent in accordance with the real needs.

Most of the capacity building programmes are short-term training events on things like project management, fund-raising and such, or in the form of study visits to other protected areas in the region. Almost all those events involved senior management level, mid-level managers and professional staff, rarely administrative staff, and almost none involved support to field staff. Rangers had to undertake obligatory training in law enforcement, and the newly employed ones usually learn fieldwork from their older colleagues.

Most of the delivered trainings are usually organised by international or national experts in the field, engaged by donor organisation as part of their ongoing work. Record on the training of their staff, curricula, certificates obtained etc, is poorly kept, and these information's are not used for planning future capacity building activities. All of this shows that it is not among protected areas management prioritoes to have a strategic approach to capacity building and to allocate discrete parts of the budget for such activities, so it is to be expected that the future capacity building will be carried out as so far – on an ad hoc basis, if and when supported by external funding sources and initiatives, and that they will primarily involve the same staff categories (directors, managers, proffessional staff, while support and field staff will not be primary beneficiaries).

Of particular concern is the fact that many of the staff, especially in the categories of rangers and administration, who are in most need for capacity building, are rather resistant to capacity building programmes (either because they are at the end of their careers, or are demotivated by working conditions, or are of a very basic educational level). In such cases, training programs will have to be designed very carefully, in order to be case-specific and take those things into consideration. The thing that could potentially be motivating are study visits, i.e. visits to other protected areas. Such visits were proven successful for other staff categories, but none has been carried out for rangers, and yet, for them this could be very beneficial.

National parks are currently the only protected areas in Montenegro that have relevant experience in protected areas management. Any other protected area should be under the authorities of the local governments (municipalities), which are lacking capacities for management of protected areas (human and financial). Some initial capacity building for new regional parks staff have been provided by the ongoing projects, and the national ranger training programme is expected to contribute to this as well. It is expected that the training needs for those new PAs will be extensive and somewhat different from those of the national parks (i.e. they will be starting from the scratch, with no or modest previous experience in biodiversity protection and its sustainable use, project management, nature protection legislation enforcement, financial management and other matters relevant for PA management).

Relaying on preparation of annual Capacity development scorecard for protected areas system in Montenegro as part of implementation of the projects "Strengthening protected areas system in Montenegro" and "Strengthening financial sustainability of protected areas in Montenegro" and conclusion of "Assessment Of Capacity Development Needs Of Protected Area Staff In Eastern Europe" that was undertaken for Montenegro with the project support, the following conclusions are drawn from an analysis of the results:

For Montenegro system, it can be concluded that the protected area workforce in the region is predominantly male. The uneven (although improving) gender balance may mean that a significant number of women are not choosing or are not chosen to work in protected areas.

The overall good educational of mid to senior management level suggests a good potential for improving individual capacity.

In some cases, high staff turnover leads to a requirement to repeat training regularly.

Despite some internal efforts to provide capacity building for staff, overall, availability of training is inadequate. The topics of training frequently do not reflect the priorities of managers, the preferences of individuals, or the competence needs identified through the self-assessments.

Protected area managers relay on support from donor organizations to provide training. This approach is not sustainable and does not strengthen capacity for capacity building at the institutional level. This leads for protected area management to not have any formal, systematic internal capacity development programmes for their staff, with inadequately recorded and documented capacity building activities. This leads to inefficiency and limits the effectiveness of capacity development programmes. It is very difficult to quantify expenditure on training and capacity development.

Specific skills categories that should be taken in consideration:

- As one of priority areas for intervention protected areas managers identifies training in business planning and fundraising.
- There is potential to train staff in training techniques and to pilot development of internal training programmes.
- Field staff would also benefit from training in supervision and instruction in the work place, which could provide a low cost, sustainable and effective way of providing training.
- Investment should only be made in GIS and IT training where there is a high likelihood of sustainability and where the protected area institution has adopted an IT culture.
- Information and data management is an important need, but for training to be effective this requires improvement of institutional as well as individual capacities. Information system developed for national parks is not used,

despite high benefits that could come not only for national parks but other protected areas as well. Use of this system should be reconsidered and set up as necessary business procedure.

- All protected areas staff whose work involves contact with the public, communities and other stakeholders would benefit from training in basic communication and interpersonal skills.
- Language training is a very important need
- All protected areas staff should have at least basic training in basic first aid, safety and security. This is a major priority.
- Training in biodiversity conservation should focus on management oriented skills rather than academic studies. The focus should be on developing, applying and monitoring the impact of specific measures designed to achieve the defined conservation goals of protected areas.
- training in working with communities at all levels; this should be a priority topic in future initiatives.
- Protected areas would benefit from standardised and compulsory training courses for all newly recruited rangers and other law enforcement personnel.
- A regular programme of training updates and refresher courses would also be beneficial for all staff in order to keep staff updated and to ensure that new staff are trained.
- There is a major need for capacity development in tourism and recreation
- Site managers require high-level training in identifying tourism and recreation opportunities and developing suitable programmes, along with viable business plans.
- Training for middle managers and technical staff should focus on the day-today management of tourism, on impact assessment and on visitor management at the site.
- Training in awareness, education and public relations, while important, would probably be most effectively delivered within training in tourism and recreation and in working with local stakeholders.

## Conclusion

Effective management of protected areas is a key challenge for national, regional and ultimately global biodiversity conservation. Constant threats continually pressure limited resources available for protected areas management what could eventually disturb integrity of the protected area on local level and system as a whole.

While there are similarities between challenges facing Montenegro system and regional protected area systems, some conclusions and challenges are country specific.

One of the most important conclusion, when taking in consideration trends recognized as previous management needs assessments, is that country needs urgently to improve management capacities of protected areas at all levels. Despite existing and past efforts a systemic and long term solution should be set in place in order to secure interdisciplinary and improved systems-thinking protected area management that embraces complexity and promotes adaptation to changing conditions.

As minimum focus of this intervention should be on:

- 1. Protected area staff in Montenegro require increased capacity development that is focused on rationally identified needs, is appropriate to the participants, is professionally designed, delivered and assessed, and is affordable and sustainable. Capacity in identifying capacity development needs for institutions and individuals should be strengthened.
- 2. All permanent protected area staff should have access to structured training or equivalent capacity development each year. Establish and train in-house training teams comprising expert practitioners from within protected area institutions
- 3. All PA managing institutions should allocate budgets for capacity development to provide the required amount of training. Recording capacity development events and activities at the institutional and individual levels should be introduced. Completion of the course should be certificated and documented in the personnel records of staff.
- 4. Encourage Investment in capacity development that is institutionally owned and driven, and based on rationally identified needs.
- 5. PA managing institutions should have capacity development plans and priorities.
- 6. Capacity development is required at the level of managing institutions as well as within protected areas.
- 7. Develop guidelines for designing and organising study tours and exchanges.
- 8. Update and diversify current university and college courses related to PA management, work with the protected area and conservation sector to develop a set of model PA related modules for all relevant higher education programmes.
- 9. All protection rangers should be required to complete the training and a formal assessment within two years of appointment.
- 10. Senior rangers require regular professional updating on legislation, threats and approaches for reducing illegal activities.
- 11. Develop, pilot and promote capacity development initiative on working with communities, training programme should be piloted for staff from protected areas where collaborative management is an important component.
- 12. Develop, pilot and promote a capacity development initiative on tourism, training programme should be developed and piloted on tourism and recreation
- 13. Build capacity for modern PA planning, monitoring and reporting for both protected area site administrations and authorities.
- 14. Build capacity for innovative and diversified financing of protected. Policy seminars on funding should be held at the institutional level.
- 15. Skills seminars should be organised for individuals for business planning, budgeting, development of funding proposals, financial management and reporting.
- 16. Provide specialist training for senior managers in skills for negotiation and conflict resolution.

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