



Developing the Protected Area System of Armenia

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Technical Report Overview on international experience on participatory management of Protected Areas

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Preface

Background of the project “Developing the Protected Area system of Armenia”

Armenia’s biodiversity is threatened on overexploitation of biodiversity, unregulated tourism activity, habitat loss and climate change. The cumulative impacts include the accelerated loss of vulnerable habitats and associated species and the growing insecurity of ecosystem services. Opportunities for communities to realize the potential social and economic benefits accruing from biodiversity are lost. Government agencies, site managers and communities have very limited experience with the management of protected landscapes that allow for creative “multiple-use” approaches. Establishing new and improving existing sanctuaries will generally require the commitment and inclusion of local communities. There are no good national examples of community-based/participatory management, sustainable tourism management, information-based decision-making, sustainable financing, and other concepts to successful management of multiple use protection categories.

Objectives of the project

The project will focus upon:

- (I) rationalization of the Protected Areas system through improving the regulatory and institutional framework relevant to Sanctuary establishment and operation; and
- (II) institutional capacity building by piloting a suite of Sanctuary management tools largely absent from Armenian’s current Protected Area management regime.

This project’s efforts will result in a national Protected Area system better equipped to include and conserve currently under-represented ecosystems (mountain meadows steppe, high mountain sub-Alpine, high mountain Alpine) and associated species.

Project investment will be in community areas to improve management of productive landscapes while helping to promote connectivity and alleviate poverty.

The project will enhance the financial sustainability of Armenia’s Protected Area system. These ecosystems outside the shelter of Armenia’s Protected Areas are critical to the long-term conservation of several globally significant species, including many endemic agro-biodiversity resources.

Main expected outcomes of the project

The main expected outcomes of the project are:

- (I.1) National operational guidelines for sanctuaries.
- (I.2) A by-law on the institutional roles and responsibilities in sanctuary management that will detailise mechanisms for the participation of communities in sanctuary management.
- (I.3) Established three new sanctuaries at underrepresented habitats. Sanctuaries will serve as demonstration sites of community-based management in a multiple use ecosystem.
- (I.4) A model of sanctuary governance and management that would ensure maximum conservation efficiency on the background of wide community engagement.
- (II.1) Curricula for various vocational training courses.
- (II.2) Combined management and business plans for each of the three sanctuaries.
- (II.3) Launching of key management and income-generation activities.
- (II.4) Lessons learned are expected to be replicated in other sanctuaries of Armenia

Duties and responsibilities of the international consultant for 2010

In 2010 the international consultant had to perform and deliver:

- Analyzing international experience on sanctuaries, in particular international experience on sanctuary participatory management;
to be documented in a technical report on “Overview of international experience on sanctuaries, with special reference on sanctuary participatory management”;
- A one week long visit to Armenia to assist and advice implementing organizations on (1) rationalization of the PA system through improving the regulatory and institutional framework relevant to Sanctuary establishment and operation (Center for Environmental Programmes SNCO); and (2) institutional capacity building by piloting a suite of Sanctuary management tools largely absent from Armenian’s current Protected Area management regime (WWF Armenia);
to be documented in a trip report.

On title, approach and content of this technical report

Based on the feedback and discussion of the draft version of this technical report it became clear, that the contents were rather expected to focus on community participatory management models and experiences in any type of Protected Areas than in particular on Protected Areas comparable to RA State Sanctuaries.

In consequence of this clearing, that not the Protected Area type “Sanctuary” should be the cornerstone, the following questions were no longer crucial to be addressed for approaching the given task:

- What does “Sanctuary” mean in terms of nature conservation on international level?
- To what type of Protected Areas on international stage do the RA State Sanctuaries compare best?
- Do RA State Sanctuaries comply with Protected Areas according to IUCN Category IV Habitat/ species management area, as suggested and assumed?

The title of this technical report was therefore changed from “Overview of international experience on sanctuaries, with special reference on sanctuary participatory management” to “Overview on international experience on participatory management of Protected Areas”.

The performed search for data and investigations focused on Protected Areas according to IUCN Category IV Habitat/ species management area in Europe, based on the assumption, that RA State Sanctuaries would comply to this type of Protected Areas, turned out to be not beneficial to the finally expected outcomes of this technical report.

As there was a lot of discussion on contained issues during the international consultant’s stay in Armenia and work with national experts and common agreement on the need for improvements in the legal basis for the RA system of Specially Protected Nature Areas, the chapter on theoretical background on Protected Areas seen from an international level was kept in the report.

Reflecting the consultations with national experts and a field visit to one of the three pilot areas of the project during the international consultant’s visit to Armenia, October 25th to 29th 2010, a chapter containing preliminary considerations on suitable models for management of pilot Protected Areas with special reference on participatory management was added.

The chapter “Overview on Sanctuaries in the Republic of Armenia” was extracted out of the main report and added as an annex.

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Abbreviations and acronyms

ArmSSR	Armenian Socialist Soviet Republic
BMA	Bioresources Management Agency
BR	Biosphere Reserve
CBD	Convention on Biological Diversity
CEPF	Critical Ecosystems Partnership Fund
CM	Council of Ministers
ECNC	European Centre for Nature Conservation
EEA	European Environment Agency
GEF	Global Environmental Facility
ICCA	Indigenous and Community Conserved Area
IUCN	International Union for Conservation of Nature
LSGB	Local Self-Governing Body
MAB	Man and the Biosphere
MoA	Ministry of Agriculture of Armenia
MoNP	Ministry of Nature Protection of Armenia
MoTM	Ministry of Territorial Management of Armenia
NGO	Non-Governmental Organization
NP	National Park
PA	Protected Area
RA	Republic of Armenia
SEI	State Environmental Inspection
SNCO	State Non-Commercial Organization
SNR	Strict Nature Reserve, State Nature Reserve
SPNA	Specially Protected Nature Area
SR	State Reserve
SSR	Socialist Soviet Republic
ToR	Terms of Reference
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNESCO	United Nations Educational Scientific and Cultural Organization
USAID	United States Agency for International Development
WCMC	World Conservation Monitoring Center
WCPA	World Commission on Protected Areas
WDPA	World Database of Protected Areas
WWF	World Wide Fund for Nature

EXECUTIVE SUMMARY

In order to provide a fundament for the further work on development of the system of Specially Protected Nature Areas in the Republic of Armenia, including its legal basis, within the project, chapter 1 of this technical report gives theoretical background on Protected Areas according to the most recent concerning IUCN documents. Starting with information on the use of the term Sanctuary on international stage, a comprehensive picture of the most up to date IUCN Guidelines for Applying Protected Area Management Categories is presented. The focus is on IUCN Category IV Habitat/ species management area and all related aspects, in particular in comparison and relation to the other categories of Protected Areas. Special attention is given to the issue of governance of Protected Areas.

Chapter 2 provides background on the importance of participation related to Protected Areas. It spans the frame on what all can be covered by this important issues and what benefits can be determined to the management of Protected Areas, if participation is successfully implemented. Aspects and forms of participation are mentioned.

In Chapter 3 selected examples for international experience on models for institutionalized participatory management of Protected Areas, with special considerations on applicability and comparability with the envisaged pilot Protected Areas of this project, are described in detail. The examples were chosen in a way, that a wide range of aspects, which would be faced in RA Protected Areas, in particular in the three pilot areas of this project, should be covered.

Chapter 4 contains detailed considerations on models for governance and management of the pilot Protected Areas (Zangezur, Khustup and Gnishik) in the frame of the project "Developing the Protected Area System of Armenia", with special reference on participatory management.

A chapter on the RA State Sanctuaries, their legislative basis, historic development and present status was put in the very end as an annex to this report.

1 Theoretical background on Protected Areas

Looking ahead to further development of the RA system of Specially Protected Nature Areas, this chapter intends to provide theoretical background on Protected Areas seen from an international perspective, with some emphasis on IUCN category IV Protected Areas, suggested to be comparable to RA State Sanctuaries.

1.1 Need for order in the „world of Protected Areas“

The “2003 United Nations List of Protected Areas”¹ presents data on 102,102 Protected Areas (out of which 68,066 assigned to IUCN Management Categories) covering 18.8 million km² and roughly a tenth of the world’s land surface. Up to date the number of Protected Areas counts at least 130,000 sites already. In 2004 Chape² pointed on the broad variety of existing terminology for the magnitude of Protected Areas worldwide: “With the massive growth in the global estate of Protected Areas, it was inevitable that legal and administrative regimes for Protected Areas would be developed by governments appropriate for situations in their own countries. Over 1,000 different terms are now known to be used at national level to designate Protected Areas, reflected in the plethora of site designations in the World Database on Protected Areas (WDPA) maintained by the UNEP World Conservation Monitoring Centre (UNEP-WCMC). These terms are usually defined in national legislation with respect to objectives and legal protection for the area in question. Sometimes there may be only marginal differences between countries for essentially the same type of Protected Area. In other cases, the same term used in different countries means something different.”

This all fits well to the term **Sanctuary**, which can be found in the World Database on Protected Areas³ as a national designation in at least 35 variants or combinations (e.g. Animal-, Bird-, Marine, Private-, Wildlife- or many other Sanctuaries).

The obvious and urgent need for “speaking one language” when talking about Protected Areas was one among others root causes for developing a worldwide definition and categorisation system for Protected Areas. A full account of the background and history of the IUCN Protected Area management category system is given by A. Phillips (2004)⁴ and in the 2008 published “Guidelines for Applying Protected Area Management Categories”⁵. This publication of the new IUCN guidelines presents the most recent results of years of intensive discussion, further development and revision of the IUCN “Guidelines for Protected Area Management Categories (1994)”⁶, which themselves were based on the first edition of such guidelines in 1978. It was therefore used as the main source for the following compilation.

¹ Chape S., Blyth S., Fish L., Fox P. and Spalding M.(compilers), 2003: 2003 United Nations List of Protected Areas. IUCN, Gland and Cambridge, and UNEP-WCMC, Cambridge

² Chape S., 2004: Systematic assignment of Protected Area management categories: an opportunity for achieving a measurable framework. In: Parks - The international journal for Protected Area managers Vol 14 No 3 Protected Area Categories. World Commission on Protected Areas (WCPA) of IUCN, Gland

³ <http://www.wdpa.org/MultiSelect.aspx>

⁴ Phillips A., 2004: The history of the international system of Protected Area management categories. In: Parks - The international journal for Protected Area managers Vol 14 No 3 Protected Area Categories. World Commission on Protected Areas (WCPA) of IUCN, Gland

⁵ Dudley N. (editor), 2008: Guidelines for Applying Protected Area Management Categories. IUCN, Gland

⁶ IUCN 1994: Guidelines for Protected Area Management Categories. CNPPA with the assistance of WCMC. IUCN, Gland and Cambridge

1.2 Fundamental considerations on Protected Areas

On the background, that the RA system of specially protected nature areas and the underlying RA legislation does not yet take into account the IUCN system of Protected Areas and the advantages of using the full range of six different categories based on different management objectives, the following text is widely based on a shortened citation of the first section of “Guidelines for Applying Protected Area Management Categories”, Dudley (2008), in order to provide sound, deep background:

“Protected areas are essential cornerstones of virtually all national and international biodiversity conservation strategies, complementary to measures to achieve conservation and sustainable use of biodiversity outside such specially protected areas. They maintain functioning natural ecosystems and ecological processes that cannot survive in most intensely managed land- and seascapes, act as refuges for species. Acting as benchmarks against human interactions with the natural world, they are often the only hope we have of stopping many threatened or endemic species from becoming extinct. Most Protected Areas exist in natural or near-natural ecosystems, or are being restored to such a state. Many contain major features of earth history and earth processes while others document the interplay between human activity and nature in cultural landscapes. Larger and more natural Protected Areas also provide space for evolution and future ecological adaptation and restoration, both increasingly important under conditions of rapid climate change.

Protected Areas also have direct human benefits. People living in or near Protected Areas and others from further away gain from the opportunities for recreation and for interactions with nature available in Protected Areas, from the genetic potential of wild species, and the environmental services provided by natural ecosystems, such as provision of water. Many Protected Areas are also essential for vulnerable human societies and conserve places of value such as sacred natural sites. Although many Protected Areas are set up by governments, others are established by local communities, indigenous peoples, environmental charities, private individuals, companies and others. Protected Areas also represent a commitment to future generations and are a means for meeting the ethical obligation to prevent species loss due to our own actions. Protecting iconic landscapes and seascapes is seen as being important from a wider cultural perspective as well, and flagship Protected Areas are as important to a country’s heritage.

Over the last 40 years the global Protected Area estate has increased from an area the size of the United Kingdom to an area the size of South America. However, significant challenges remain. Many Protected Areas are not yet fully implemented or managed. The vast majority of Protected Areas were identified and gazetted during the twentieth century, in what is almost certainly the largest and fastest conscious change of land management in history (although not as large as the mainly unplanned land degradation that has taken place over the same period). This shift in values has still to be fully recognised and understood. Protected Areas continue to be established, and received a boost in 2004 when the Convention on Biological Diversity (CBD) agreed an ambitious Programme of Work on Protected Areas, which aims to complete ecologically-representative Protected Area systems around the world and has almost a hundred timelimited targets. This is necessary because although the rate of growth has been impressive, many Protected Areas have been set up in remote, unpopulated or only sparsely populated areas such as mountains, ice-fields and tundra and there are still notable gaps in Protected Area systems in some forest and grassland ecosystems, in deserts and semi-deserts and in fresh water areas. Many of the world’s wild plant and animal species do not have viable populations in Protected Areas and a substantial proportion remain completely outside Protected Areas. New Protected Areas are therefore likely to continue to be established in the future. One important development in the last decade is the increasing professionalism of Protected Area selection. At the same time, there has been a rapid increase in understanding of how such areas should be managed. In the rush to establish Protected Areas, often to save fragments of natural land and water from a sudden onslaught of development, Protected Areas were often set aside

without careful analysis of the skills and capacity needed to maintain them. Knowledge is growing fast at all levels of management, from senior planners to field rangers. In a parallel development, many local communities and traditional and indigenous peoples are starting to see Protected Areas as one way of protecting places that are important to them, for instance sacred natural sites or areas managed for environmental benefits such as clean water or maintenance of fish stocks.”

The term “Protected Area” is therefore shorthand for a sometimes bewildering array of designations, of which some of the best known are National Park, Nature Reserve, Wilderness Area, Wildlife Management Area and Landscape Protected Area. More importantly, the term embraces a wide range of different management approaches, from highly protected sites where few if any people are allowed to enter, through parks where the emphasis is on conservation but visitors are welcome, to much less restrictive approaches where conservation is integrated into the traditional (and sometimes not so traditional) human lifestyles or even takes place alongside limited sustainable resource extraction. Some Protected Areas ban activities like food collecting, hunting or extraction of natural resources while for others it is an accepted and even a necessary part of management. The approaches taken in terrestrial, inland water and marine Protected Areas may also differ significantly.

The variety reflects recognition that conservation is not achieved by the same route in every situation and what may be desirable or feasible in one place could be counter-productive or politically impossible in another. Protected Areas are the result of a welcome emphasis on long-term thinking and care for the natural world but also sometimes come with a price tag for those living in or near the areas being protected, in terms of lost rights, land or access to resources. There is increasing and very justifiable pressure to take proper account of human needs when setting up Protected Areas and these sometimes have to be “traded off ” against conservation needs. Whereas in the past, governments often made decisions about Protected Areas and informed local people afterwards, today the emphasis is shifting towards greater discussions with stakeholders and joint decisions about how such lands should be set aside and managed.

Such negotiations are never easy but usually produce stronger and longer-lasting results for both conservation and people. IUCN recognises that many approaches to establishing and managing Protected Areas are valid and can make substantive contributions to conservation strategies. This does not mean that they are all equally useful in every situation: skill in selecting and combining different management approaches within and between Protected Areas is often the key to developing an effective functioning Protected Area system. Some situations will need strict protection; others can function with, or do better with, less restrictive management approaches or zoning of different management strategies within a single Protected Area.

In an attempt to make sense of and to describe the different approaches, IUCN has agreed a definition of what a Protected Area is and is not, and then identified six different Protected Area categories, based on management objectives, one of which is subdivided into two parts. Although the categories were originally intended mainly for the reasonably modest aim of helping to collate data and information on Protected Areas, they have grown over time into a more complex tool. Today the categories both encapsulate IUCN’s philosophy of Protected Areas and also help to provide a framework in which various protection strategies can be combined together, along with management systems outside Protected Areas, into a coherent approach to conserving nature. The IUCN categories are now used for purposes as diverse as planning, setting regulations, and negotiating land and water uses.

Protected Areas exist in an astonishing variety – in size, location, management approaches and objectives. Any attempt to squash such a rich and complicated collection into half a dozen neat little boxes can only ever be approximate. The IUCN Protected Area definition and categories are not a straitjacket but a framework to guide improved application of the categories.”

History and purpose of the IUCN Protected Area management categories are as well described in the first section of Dudley (2008).

1.3 Definition of „Protected Area“

Before applying a specific IUCN PA category to a specific site first has to be checked if the site meets the definition of a Protected Area.

The **new IUCN definition of a Protected Area** was first drafted at a meeting on the categories in Almeria, Spain in May 2007. Since then it has been successively refined and revised by many people within IUCN-WCPA and finally published in Dudley (2008) as follows:

“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”.

A number of countries have considered the impacts of human activities on Protected Areas in three dimensions and enshrined three-dimensional aspects into their Protected Area legislation. Issues can include for instance: protecting the airspace above a Protected Area from disturbance from low-flying aircraft, limiting human activity below the surface such as mining and other extractive industries or restricting fishing, diving and underwater noise in marine and inland water sites.

The definition of a Protected Area should be applied in the context of the following accompanying principles:

- For IUCN, only those areas where the main objective is conserving nature can be considered Protected Areas; this can include many areas with other goals as well, at the same level, but in the case of conflict, nature conservation will be the priority;
- Protected Areas must prevent or eliminate where necessary any exploitation or management practice that will be harmful to the objectives of designation;
- The choice of category should be based on the primary objective(s) stated for each Protected Area;
- The system is not intended to be hierarchical;
- All categories make a contribution to conservation but objectives must be chosen with respect to the particular situation; not all categories are equally useful in every situation;
- Any category can exist under any governance type and vice versa;
- A diversity of management approaches is desirable and should be encouraged, as it reflects the many ways in which communities around the world have expressed the universal value of the Protected Area concept;
- The category should be changed if assessment shows that the stated, long-term management objectives do not match those of the category assigned;
- However, the category is not a reflection of management effectiveness;
- Protected Areas should usually aim to maintain or increase the degree of naturalness of the ecosystem being protected;
- The definition and categories of Protected Areas should not be used as an excuse for dispossessing people of their land.

IUCN emphasises that Protected Areas should not be seen as isolated entities, but part of broader conservation landscapes, including Protected Area systems and wider ecosystem approaches to conservation that are implemented across a landscape. The categories should be applied in the context of national or other Protected Area systems and as part of the ecosystem approach. Explanations and definitions for both, PA systems and ecosystem approach, are given in the new guidelines (Dudley 2008).

1.4 Relation of names and IUCN categories of Protected Areas

The categories system was introduced in large part to help standardise descriptions of what constitutes a particular Protected Area. Thus, the names of all Protected Areas applied to the categories, except the ones in category II, were chosen to relate, more or less closely, to the main management objective of the category.

As for example, the term “National Park”, which existed long before the categories system, was found to apply particularly well to large Protected Areas under category II. However, many existing National Parks all over the world have very different aims from those defined under category II. As a matter of fact, some Protected Areas called “National Park” on national level have to be categorised under other IUCN categories than II. It is important to note that the fact that a government has called an area a National Park does not mean that it has to be managed according to the guidelines under category II. Instead the most suitable management system should be identified and applied; the name is a matter for governments and other stakeholders to decide. There are similar examples for all categories.

1.5 IUCN Protected Area Management Categories and their principles

The 2008 “Guidelines for Applying Protected Area Management Categories” describe the following individual IUCN management categories of Protected Areas in turn under a series of headings: primary objective(s); other objectives; distinguishing features; role in the landscape or seascape; what makes the category unique?; issues for consideration.

- Category I, distinguished in: Ia: Strict nature reserve and Ib: Wilderness area
- Category II: National park
- Category III: Natural monument or feature
- Category IV: Habitat/species management area
- Category V: Protected landscape/ seascape
- Category VI: Protected Area with sustainable use of natural resources

Although quite into detail and with a lot of explanation and interpretive information the descriptions of the single categories can just provide a framework. Dudley (2008): “Some Protected Areas will fall naturally into one or another category, for others the distinctions will be less obvious and will require in-depth analysis of options. Because assignment of a category depends on management objective, it depends more on what the management authority intends for the site rather than on any strict and inviolable set of criteria. Some tools are available to help make the decision about category⁷, but in many cases the final decision will be a matter of collective judgement. In addition, because the system is global, it is also inevitably fairly general. IUCN encourages countries to add greater detail to definition of the categories for their own national circumstances if this would be useful, keeping within the general guidelines. Several countries have already done this or are in the process of doing so and IUCN encourages this process.

The definition implies a common set of objectives for Protected Areas; the categories in turn define differences in management approaches. The following objectives should or can apply to all Protected Area categories: i.e., they do not distinguish any one category from another.

All Protected Areas should aim to:

- Conserve the composition, structure, function and evolutionary potential of biodiversity;

⁷ E.g. Nigel Dudley N. and Borrini-Feyerabend G., 2005: A tool to help selecting the appropriate IUCN categories and governance types for Protected Areas. 2nd version. IUCN WCPA and CEESP.

- Contribute to regional conservation strategies (as core reserves, buffer zones, corridors, steppingstones for migratory species etc.);
- Maintain diversity of landscape or habitat and of associated species and ecosystems;
- Be of sufficient size to ensure the integrity and longterm maintenance of the specified conservation targets or be capable of being increased to achieve this end;
- Maintain the values for which it was assigned in perpetuity;
- Be operating under the guidance of a management plan, and a monitoring and evaluation programme that supports adaptive management;
- Possess a clear and equitable governance system.

All Protected Areas should also aim where appropriate to:

- Conserve significant landscape features, geomorphology and geology;
- Provide regulatory ecosystem services, including buffering against the impacts of climate change;
- Conserve natural and scenic areas of national and international significance for cultural, spiritual and scientific purposes;
- Deliver benefits to resident and local communities consistent with the other objectives of management;
- Deliver recreational benefits consistent with the other objectives of management;
- Facilitate low-impact scientific research activities and ecological monitoring related to and consistent with the values of the Protected Area;
- Use adaptive management strategies to improve management effectiveness and governance quality over time;
- Help to provide educational opportunities (including about management approaches);
- Help to develop public support for protection.

It should be noted that IUCN's members adopted a recommendation which suggested that mining (all exploration and extraction of mineral resources) should not take place in IUCN category I–IV Protected Areas, recommended, prohibit by law. The recommendation also includes a paragraph relating to category V and VI Protected Areas: “in categories V and VI, exploration and localized extraction would be accepted only where the nature and extent of the proposed activities of the mining project indicate the compatibility of the project activities with the objectives of the Protected Areas”. This is a recommendation and not in any way binding on governments; some currently do ban mining in categories I–IV Protected Areas and others do not.”

1.6 IUCN Category IV: Habitat/ Species Management Area

The IUCN “Guidelines for Protected Area Management Categories (1994)”⁸ mentioned Category IV Habitat/ Species Management Area as a Protected Area managed mainly for conservation through management intervention and defined it as “area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species”. “Wildlife **Sanctuary**” together with “Nature Conservation Reserve” and “Managed Nature Reserve” was mentioned as an equivalent category in the 1978 category system. In the revised version of the PA categories published in the “Guidelines for Applying Protected Area Management Categories” (2008) the term **Sanctuary** is not used or mentioned at all for management category IV: Habitat/ Species Management Area.

However, as the Armenian State Sanctuaries according to the RA Law On Specially Protected Nature Areas are suggested and assumed as IUCN category IV, the following text, which is a comprehensive citation of the most up to date description of this category in

⁸ IUCN 1994: Guidelines for Protected Area Management Categories. CNPPA with the assistance of WCMC. IUCN, Gland and Cambridge

Dudley (2008), is intended to facilitate a check on the applicability of RA Sanctuaries to category IV:

“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.

Primary objective: To maintain, conserve and restore species and habitats.

This is a change from the 1994 guidelines, which defined Category IV as PAs that need regular management interventions. The change has been made because this was the only category to be defined by the process of management rather than the final objective and because in doing so it meant that small reserves aimed to protect habitats or individual species tended to fall outside the categories system.

Other objectives:

- To protect vegetation patterns or other biological features through traditional management approaches;
- To protect fragments of habitats as components of landscape or seascape-scale conservation strategies;
- To develop public education and appreciation of the species and/or habitats concerned;
- To provide a means by which the urban residents may obtain regular contact with nature.

Distinguishing features: Category IV Protected Areas usually help to protect, or restore:

- 1) flora species of international, national or local importance;
- 2) fauna species of international, national or local importance including resident or migratory fauna; and/or
- 3) habitats.

The size of the area varies but can be relatively small; this is however not a distinguishing feature. Management will differ depending on need. Protection may be sufficient to maintain particular habitats and/or species. However, as category IV Protected Areas often include fragments of an ecosystem, these areas may not be self-sustaining and will require regular and active management interventions to ensure the survival of specific habitats and/or to meet the requirements of particular species. A number of approaches are suitable:

- Protection of particular species: to protect particular target species, which will usually be under threat (e.g., one of the last remaining populations);
- Protection of habitats: to maintain or restore habitats, which will often be fragments of ecosystems;
- Active management to maintain target species: to maintain viable populations of particular species, which might include for example artificial habitat creation or maintenance, supplementary feeding or other active management systems;
- Active management of (semi-)natural ecosystems: to maintain (semi-)natural habitats that are either too small or too profoundly altered to be self-sustaining, e.g., if natural herbivores are absent they may need to be replaced by livestock or manual cutting; or if hydrology has been altered this may necessitate artificial drainage or irrigation;
- Active management of culturally-defined ecosystems: to maintain cultural management systems where these have a unique associated biodiversity. Continual intervention is needed because the ecosystem has been created or at least substantially modified by management. The primary aim of management is maintenance of associated biodiversity.

Active management means that the overall functioning of the ecosystem is being modified by e.g., halting natural succession, providing supplementary food or artificially creating habitats: management will often include more than just addressing threats, such as poaching or invasive species, as these activities take place in virtually all Protected Areas in any category and are therefore not diagnostic. Category IV PAs will generally be publicly accessible.

Role in the landscape/ seascape:

Category IV Protected Areas frequently play a role in “plugging the gaps” in conservation strategies by protecting key species or habitats in ecosystems. They could, for instance, be used to:

- Protect critically endangered populations of species that need particular management interventions to ensure their continued survival;
- Protect rare or threatened habitats including fragments of habitats;
- Secure stepping-stones (places for migratory species to feed and rest) or breeding sites;
- Provide flexible management strategies and options in buffer zones around, or connectivity conservation corridors between, more strictly Protected Areas that are more acceptable to local communities and other stakeholders;
- Maintain species that have become dependent on cultural landscapes where their original habitats have disappeared or been altered.

What makes category IV unique?

Category IV provides a management approach used in areas that have already undergone substantial modification, necessitating protection of remaining fragments, with or without intervention.

Category IV differs from the other categories in the following ways:

Category Ia	Category IV Protected Areas are not strictly protected from human use; scientific research may take place but generally as a secondary objective.
Category Ib	Category IV Protected Areas can not be described as “wilderness”, as defined by IUCN. Many will be subject to management intervention that is inimical to the concept of category Ib wilderness areas; those that remain un-managed are likely to be too small to fulfil the aims of category Ib.
Category II	Category IV PAs aim their conservation at particular species or habitats and may in consequence have to pay less attention to other elements of the ecosystem in consequence, whereas category II Protected Areas aim to conserve fully functional ecosystems. Categories II and IV may in some circumstances closely resemble each other and the distinction is partly a matter of objective – i.e., whether the aim is to protect to the extent possible the entire ecosystem (category II) or is focused to protect a few key species or habitats (category IV).
Category III	The objective of category IV areas is of a more biological nature whereas category III is site-specific and more morphologically or culturally oriented.
Category V	Category IV Protected Areas aim to protect identified target species and habitats whereas category V aims to protect overall landscapes/seascapes with value for nature conservation. Category V Protected Areas will generally possess socio-cultural characteristics that may be absent in IV. Where category IV areas may use traditional management approaches this will explicitly be to maintain associated species as part of a management plan and not more broadly as part of a management approach that includes a wide range of for-profit activities.
Category VI	Management interventions in category IV PAs are primarily aimed at maintaining species or habitats while in category VI PAs they are aimed at linking nature conservation with the sustainable use of resources. As with category V, category VI PAs are generally larger than category IV.

Issues for consideration:

- Many category IV Protected Areas exist in crowded landscapes, where human pressure is comparatively greater, both in terms of potential illegal use and visitor pressure.
- The category IV PAs that rely on regular management intervention need appropriate resources from the management authority and can be relatively expensive to maintain unless management is undertaken voluntarily by local communities or other actors.

- Because they usually protect part of an ecosystem, successful long-term management of category IV Protected Areas necessitates careful monitoring and an even greater than usual emphasis on overall ecosystem approaches and compatible management in other parts of the landscape.”

1.7 Relationship between the categories

The “Guidelines for Applying Protected Area Management Categories” (2008) contain the following further very important clarifications:

“The categories do not imply a simple hierarchy, either in terms of quality and importance or in other ways – for example the degree of intervention or naturalness. But nor are all categories equal in the sense that they will all be equally useful in any situation. One of the associated principles to the Protected Area definition states: “All categories make a contribution to conservation but objectives should be chosen with respect to the particular situation; not all categories are equally useful in every situation”.

This implies that a well-balanced PA system should consider using all the categories, although it may not be the case that all of the options are necessary or practical in every region or country. In the large majority of situations, at least a proportion of PAs should be in the more strictly protected categories i.e., I–IV. Choice of categories is often a complex challenge and should be guided by the needs and urgency of biodiversity conservation, the opportunities for delivery of ecosystems services, the needs, wants and beliefs of human communities, land ownership patterns, strength of governance and population levels. Decisions relating to PAs will usually be subject to a certain amount of trade-offs as a result of competing land uses and of consultative processes. It is important that conservation objectives are given adequate attention and weight in relevant decision-making processes.

Management approaches and categories are not necessarily fixed forever and can and do change if conditions change or if one approach is perceived to be failing; however changing the category of a Protected Area should be subject to procedures that are at least as rigorous as those involved in the establishment of the Protected Area and its category in the first place.

Many people assume that the categories imply a gradation in naturalness in order from I to VI but the reality is more complicated as shown in figure 1, which attempts to compare average naturalness of all the categories.”

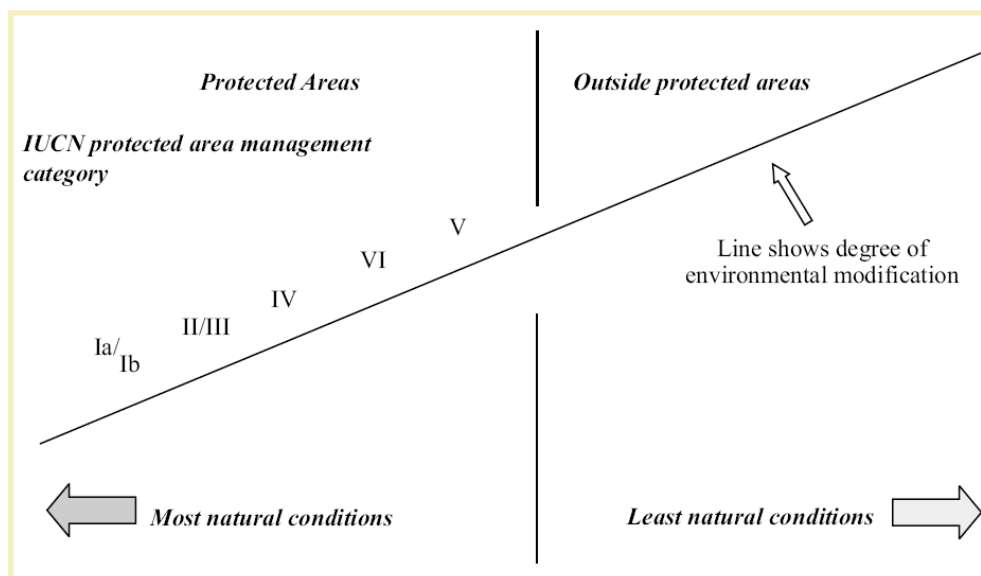


Figure 1: Protected Area Management Categories and degree of environmental modification (by Phillips A., 2002: Management Guidelines for IUCN Category V Protected Areas: Protected Landscapes/ Seascapes. IUCN, Gland and Cambridge)

1.8 Applying the categories (with emphasis to category IV)

A special section of the “Guidelines for Applying Protected Area Management Categories” (2008), quoted below in this chapter, is – meeting the core title of the publication - on the processes for applying categories, including choosing and agreeing the most suitable category for a given situation, assigning the category to meet national legal requirements and international standards and norms and recording the PA and category with the UNEP WCMC:

1.8.1 Choosing the correct category

“Once an area has been identified as a PA according to the IUCN definition, the next stage in classification is to determine which category matches most closely the overall management objectives of the PA. As the categories system reflects management objectives, it follows that once a decision has been made about the management of a PA the correct category should be obvious.

This is sometimes how it happens. Unfortunately, in many other cases there is plenty of room for confusion: perhaps because there are multiple objectives within a PA (maybe in different parts of the area); or because PA objectives are evolving and are often becoming more complex; or because there is still uncertainty about what particular approach works best. Agreeing objectives (perhaps reassessing the original objectives) and developing management plans are both closely linked to agreement of a category.

Many people have asked IUCN for a foolproof way of identifying a category but this is difficult. There are often several ways to approach management in the same PA, which can therefore be categorized in different ways. What happens if most of a PA is managed in one way but part of it in another? Is there a minimum size or maximum size for particular categories? Are international designations such as World Heritage or Ramsar associated with particular categories? How much human activity is “allowed” in PAs in different categories?

It should be remembered that many countries have legislation setting out clearly the criteria under which different types of PAs are identified: these may or may not equate with the IUCN categories. In the latter case, countries that want to list their PAs correctly on the WDPA need to work out the relationship between their own classification system and the IUCN categories – many have already done so. In other cases governments have taken the IUCN categories and further refined them for the specific conditions in the country. As long as the refining process does not undermine the basic principles of a PA or of specific categories, IUCN encourages such a process. It follows that choice of category will vary with conditions and from one country to the next and can be a complicated process.

It is also worth considering why categories are being chosen. Categorization can take place at three stages in the life of a PA and although this should not influence the result, it may make important differences to the process. Categories can be selected:

- Before the PA is established, when decisions about management objectives should be part of the planning process.
- After the PA has been established, when management objectives have already been decided and choosing the appropriate category is mainly about finding the one that best fits the PAs as a whole; although looking carefully at the categories at this stage might also stimulate some changes in management objectives and activities.
- In an established PA where there is already a category but either management is changing to address emerging conservation priorities and problems or there are doubts about whether the right category was chosen in the first place. However, changing a category in most countries is governed by the legal framework on PAs and should follow

an assessment at least as rigorous as the one applied in defining the existing category in the first place.

How does the management objective relate to the category?

- **The category should be based on the primary management objective(s) of the PA as listed for individual categories:** (It also needs to fit the definition of a PA)

This assumes that the agency responsible for the PA is able to decide on the main aim of management. This is not necessarily an easy choice to make; on the other hand failure to do so suggests that management itself may be confused and likely to be ineffective. In principle a good assessment process to identify the right category should involve key stakeholders and other agencies dealing with the conservation and management of the PA and should be based on best available natural and social science. Identifying a primary objective does not mean that other aims are not important: almost all PAs have multiple values. In practice it is not always easy to make a judgement”.

Only those examples of common questions that arise, given by Dudley (2008), which relate to category IV or to possible settings existing in RA State Sanctuaries are quoted here:

“Ecosystem or habitat – category II or IV? Category II PAs are supposed to conserve whole ecosystems whereas category IV generally aims to conserve species or fragments of ecosystems. In fact, very few PAs are large enough to protect entire ecosystems, with the associated migration routes, watershed functions etc. Distinguishing II and IV is therefore often a matter of degree: a category II PA should aim to protect the majority of naturally-occurring ecosystem functions, while a category IV PA is usually either a fragment of an ecosystem or an area that relies on regular management intervention to maintain an artificial ecosystem (e.g., a coppice woodland or regularly mown area of grassland). Category IV PAs are generally smaller than category II although this is not diagnostic and large category IV PAs exist.

Management intervention or cultural landscape – category IV or V? A category IV PA is managed primarily for its flora and fauna values, and interventions such as coppicing, vegetation clearance, prescribed burning etc. are undertaken mainly with this in mind: any profits or social benefits from such ventures are secondary. Management interventions in category V PAs are conversely aimed at sustaining human livelihoods and are not just part of a biodiversity management strategy. A category V PA therefore uses cultural management systems that also have a value for biodiversity, such as cork oak woodland that is managed primarily for cork but also has important wildlife values if integrated into a landscape approach to conservation. In most category V PAs, a range of different management approaches are often combined.

Restoring a cultural landscape – category V or something else? A cultural landscape would normally be category V. But if the aim of management is to restore a former cultural landscape into something much more natural, then the management objective and therefore in turn the category might fit better as something else, such as category Ib, or II or IV. For example, protecting relict woodland formerly used for sheep grazing with an aim to restoring it to something resembling the original forest ecosystem would not usually be classified as a category V Protected Area.

Sustainable use or incidental use by local communities – when to use category VI? Many PA categories permit limited human use; for example many wilderness areas (Ib) and protected ecosystems (II) permit local people to carry out traditional small-scale livelihood activities that are in harmony with the nature in the PA such as (depending on individual management agreements) reindeer herding, fishing, collection of non-timber forest products and limited subsistence hunting. But in these cases the objective is conservation of wilderness or ecosystems and human take-off should make a minimal impact on this. In category VI the objective of management is sustainable use in synergy with nature conservation and it is expected that the activities are managed in a way that does not

produce a substantial impact on these ecosystems. The difference is partly a matter of degree.

Cultural landscape – what is not category V? Few if any land areas have not been modified by human societies over hundreds or thousands of years. It could be argued that every PA in the world is a category V. But whilst recognising the role of human communities, IUCN distinguishes areas that have predominantly natural species and ecosystems (not usually category V) from those where the level of modification is more intense, such as areas with long-term settled farming or management processes that make major changes to ecology and species diversity (usually category V).

- **The primary management objective should apply to at least three-quarters of the PA – “the 75 percent rule”:**

Many PAs may have specific zones within them where other uses are permitted, e.g.: Tourist lodges and camps in category II National Parks; villages remaining within otherwise strictly PAs; small strictly protected core areas in what is otherwise a cultural landscape managed as category V; areas where fishing is permitted within what is otherwise a strictly protected freshwater PA. IUCN recognises this and recommends that up to 25 percent of land or water within a PA can be managed for other purposes so long as these are compatible with the primary objective of the PA.

How is the category affected by size of Protected Area?

There are no hard and fast rules but some categories tend to be relatively larger or smaller. Overall scale often depends on other factors, such as the amount of land or water available, population density etc. In terms of relative scale some categories are more likely to be either large or small, because of their particular management objectives, but there could be exceptions for virtually every category.”

To aid selection, a table in Dudley (2008) suggests relative scale for the categories and explains why, but also gives some exceptions to show that size alone should not be a determining factor. For category IV there is mentioned: “Relative size is often small; if the site is set up to protect only individual species or habitats this suggests that it is relatively small. But, larger areas set aside as nature reserves but needing regular management to keep functioning might best be IV.

Can a Protected Area contain more than one category?

The answer is that it depends; on ownership, governance and to some extent on the wishes of the Protected Area authority or authorities. There are three situations where single or contiguous PAs may be assigned different categories:

- Distinct PAs nested within larger Protected Areas can have their own category:
The most common model would be a large, less strictly Protected Area containing smaller, more strictly Protected Areas inside. For example, many category V areas contain within them category I and IV areas – possibly under completely different management authorities or governance approaches, but consistent with the application of the categories system. (e.g.: The Vercors Regional Nature Park in France (category V) contains the Hauts Plateaux du Vercors within it (category IV); in the UK, the National Parks have category V status and include a number of National Nature Reserves (category IV).
- Different zones in larger PAs can have their own category, if the zones are described and fixed in law:
Zoning is usually a management tool within a single Protected Area and would not generally be identified by a separate category, but there are exceptions. In some Protected Areas, parts of a single management unit are classified by law as having different management objectives and being separate Protected Areas: in effect, these “parts” are individual Protected Areas that together make up a larger unit, although they are all under a single management authority.
- Different Protected Areas making up a transboundary PA may have different categories.

What about the areas around Protected Areas?

Buffer zones, biological corridors etc. may or may not also be Protected Areas (and thus eligible for a category) depending on the form of management and recognition by the state.”

1.8.2 Assignment of categories

The process of assignment is up to the country or governing body concerned, but IUCN outlines some principles and a proposed methodology’s approach to assignment of the Protected Area management categories relating to responsibility, stakeholder involvement and guarantees. Just the following shall be outlined here. More and a proposed process for assignment and a good guidance can be found in Dudley (2008):

“Use of the categories is voluntary and nobody has the right to impose these. States usually have the final legal decision, or at least an overarching responsibility, about the uses of land and water, so it makes sense that states should decide on the Protected Area category as well. Nonetheless, IUCN urges states to consult with relevant stakeholders in assigning categories.”

1.9 Using the categories

One section of the “Guidelines for Applying Protected Area Management Categories” (2008) provides information on the practical use of the IUCN categories: “The categories were originally designed as a way of classifying and recording Protected Areas. Gradually new uses have been added, including in particular a role in planning Protected Area systems and in developing coherent conservation policy: after initial reluctance IUCN members themselves endorsed this approach through a recommendation that governments ban mining in category I–IV Protected Areas. Protected Area managers and authorities are starting to look at the options available for reducing the impact climate change will have on Protected Areas and for maximizing the benefits that well-designed Protected Area systems can have for wider society in mitigating the impacts.

When reviewing the categories of existing Protected Areas to determine the type of protection that will best conserve the biodiversity within that Protected Area, there is no hierarchy that suggests, for instance, that a category I Protected Area is invariably better than a category II or III or IV. On the other hand, categories are not simply interchangeable. The only principle that should apply in assigning categories is the appropriateness of a Protected Area’s assigned management purpose within the system relative to the ecological needs of, and threats to, the species or ecosystem in the context of the entire landscape or seascape where that biodiversity occurs. The Protected Area objectives also need to be considered at the moment of reviewing and assigning a management category.”

Out of some considerations for assigning Protected Area management categories in Protected Area system planning presented by Dudley (2008), the following are pointed out:

“There are no hard and fast rules about choosing a particular category for a given Protected Area. However, it should be recognised that not all Protected Areas will be managed in the same way and that the choice of management approach needs to be made by weighing the different opportunities and pressures relating to the area. It is recommended to

- start with the ecological needs of species and ecosystems;
- consider the threats to the species or ecosystem values: some threats lend themselves to a particular management approach. For example poaching in marine Protected Areas may be best addressed by allowing local fishing communities access to an agreed level of catch (e.g., in a category V or VI Protected Area) thus encouraging them to help control poaching by outsiders);

- consider developing and implementing a process to assign/ review management categories in a country: A national Protected Area agency should develop an official process to review and assign management categories.
- consider the landscape when assigning categories: Choice of category should reflect the Protected Area's contribution to the overall conservation mosaic rather than just the values of the individual site, i.e., management objectives for any given site should not be selected in isolation.
- consider, that stakeholders matter: Management options should consider the needs, capacities and desires of local communities and should generally be selected after discussion with stakeholders – management objectives that are supported by local communities are more likely to succeed than those that are unpopular or opposed.
- consider management effectiveness when assigning Protected Area categories: Managers should also take into account the existing and likely management effectiveness of a given area when recommending management purpose (Protected Area categories). Ineffective or non-existent management in a category I or II Protected Area (the paperpark syndrome) may achieve less conservation impact than an effective category V or VI Protected Area even if the management rules in the latter are less stringent.
- consider that more restrictive management categories are not always better: conservation scientists often assume that categories I–IV represent more effective conservation than categories V–VI in designation of Protected Areas. This is not always the case; for example less restrictive approaches that cover larger areas can sometimes be more effective.
- use the categories as a tool for within-Protected Area planning: Within a single Protected Area, several zones with different management objectives can be agreed if this helps overall management. Consider temporary zones within Protected Areas (e.g., to allow low-impact sustainable exploitation of non-timber forest products by local communities).
- consider social benefits of diversifying the category portfolio: considering a variety of Protected Area management categories can often improve public perceptions of Protected Areas and increase their likelihood of success – particularly if people recognise that not every Protected Area means that the resources are “locked up”. Use of certain categories can build commitment by stakeholders for conservation and expand options for designation of areas for protection.

1.10 Governance of Protected Areas

1.10.1 Governance types and ownership of PAs according to IUCN

Whereas governance of Protected Areas is a crucial question, it is however a different issue to the management objectives, which build the basis for the differentiation of the Protected Area categories. Dudley (2008)⁹ provides the following information on governance of PAs:

“The IUCN Protected Area definition and management categories are “neutral” about types of management authority or ownership. The land, water and natural resources in any management category can be owned and/or directly managed by governmental agencies, NGOs, communities, indigenous peoples and private parties – alone or in combination. Both IUCN and the CBD recognise the legitimacy of a range of governance types. With respect to who holds decision-making and management authority and responsibility about Protected Areas, IUCN recognises four broad types of governance of Protected Areas, any of which can be associated with any management objective and PA category:

⁹ Dudley N. (editor), 2008: Guidelines for Applying Protected Area Management Categories.

Type A: Governance by government (at federal/ state/ subnational or municipal level).

A government body (such as a Ministry or Park Agency reporting directly to the government) holds the authority, responsibility and accountability for managing the Protected Area, determines its conservation objectives (such as the ones that distinguish the IUCN categories), develops and enforces its management plan and often also owns the Protected Area's land, water and related resources. Sub-national and municipal government bodies can also be in charge of the above and/ or own land and resources in Protected Areas. In some cases, the government retains the control of a Protected Area – in other words decides the objectives of managing the area – but delegates the planning and/or daily management tasks to a para-statal organization, NGO, private operator or community. Under a state's legal framework and governance there may or may not be a legal obligation to inform or consult stakeholders prior to setting up Protected Areas and making or enforcing management decisions. Participatory approaches are however increasingly common and generally desirable. Accountability measures also vary according to the country.

Type B: Shared governance.

Complex institutional mechanisms and processes are employed to share management authority and responsibility among a plurality of (formally and informally) entitled governmental and non-governmental actors. Shared governance, sometimes also referred to as co-management, comes in many forms. In “collaborative” management, decision-making authority and responsibility rest with one agency but the agency is required – by law or policy – to inform or consult other stakeholders. Participation in collaborative management can be strengthened by assigning to multi-stakeholder bodies the responsibility of developing technical proposals for Protected Area regulation and management, to be submitted ultimately to a decision-making authority for approval. In “joint” management, various actors sit on a management body with decision-making authority and responsibility. Decisions may or may not require consensus. In any of these cases, once decisions about management are taken, their implementation needs to be delegated to agreed bodies or individuals. One particular form of shared governance relates to transboundary Protected Areas, which involve at least two or more governments and possibly other local actors.

Type C: Private governance.

Private governance comprises Protected Areas under individual, cooperative, NGO or corporate control and/or ownership, and managed under not-for-profit or for-profit schemes. Typical examples are areas acquired by NGOs explicitly for conservation. Many individual landowners also pursue conservation out of respect for the land and a desire to maintain its aesthetic and ecological values. Incentive schemes, such as revenues from ecotourism and hunting or the reduction of levies and taxes, often support this governance type. In all these cases, the authority for managing the protected land and resources rests with the landowners, who determine the conservation objective, develop and enforce management plans and remain in charge of decisions, subject to applicable legislation. In cases where there is no official recognition by the government, the accountability of private Protected Areas to society may be limited. Some accountability, for example in terms of long-term security, can be negotiated with the government in exchange for specific incentives.

Type D: Governance by indigenous peoples and local communities.

This type includes two main subsets: (1) indigenous peoples' areas and territories established and run by indigenous peoples and (2) community conserved areas established and run by local communities. The subsets, which may not be separated, apply to both sedentary and mobile peoples and communities. IUCN defines this governance type as: PAs where the management authority and responsibility rest with indigenous peoples and/or local communities through various forms of customary or legal, formal or informal, institutions and rules. These can be relatively complex. For instance, land and/or sea resources may be collectively owned and managed while other resources may be managed individually or on a clan basis. Different indigenous peoples or communities may be in charge of the same area at different times, or of different resources within the same area. Rules generally intertwine

with cultural and spiritual values. The customary rules and organizations managing natural resources often possess no statutory legal recognition or sanctioning power. In other cases, however, indigenous peoples and/or local communities are fully recognised as the legitimate authority in charge of state-listed Protected Areas or have legal title to the land, water or resources. Whatever the structure, the governance arrangements require that the area under the control of indigenous peoples and/or local communities has identifiable institutions and regulations that are responsible for achieving the Protected Area objectives.

IUCN suggests that the governance type of a Protected Area be identified and recorded at the same time as its management objective (category) in national environmental statistics and accounting systems and in Protected Area databases. In some cases deciding on the governance type may be as or more delicate and complex than identifying the category and one may inform and influence the other; also, many Protected Areas are likely to change their governance types over time. As mentioned, in the case of large Protected Areas, several governance types may exist within the boundary of a single area. In considering governance for the purpose of reporting to the World Database on Protected Areas, IUCN WCPA proposes adopting a two-dimensional structure. Though management objectives for the categories can be developed and assigned without regard for governance, comparisons of Protected Areas and their effectiveness will be greatly enhanced by listing governance type as well as management category in future databases.

Governance types describe the different types of management authority and responsibility that can exist for Protected Areas but do not necessarily relate to ownership. In some of the governance types – e.g., state and private Protected Areas – governance and ownership will often be the same. However in other cases this will depend on individual country legislation: for example many indigenous peoples' Protected Areas and community conserved areas are found on state-owned land. In large and complex Protected Areas, particularly in categories V and VI, there may be multiple governance types within the boundaries of one Protected Area, possibly under the umbrella of an overview authority.”

1.10.2 Governance quality

As well for the important issues of governance quality and management effectiveness there is a lot of principle information given by Dudley (2008):

“For Protected Areas in all management categories, management effectiveness provides a measure of the actual achievement of the conservation goals. Management effectiveness is also influenced by governance quality, that is, “how well” a governance regime is functioning. The concept of governance quality applied to any specific situation attempts to provide answers to questions such as “Is this ‘good’ governance?” and “Can this governance setting be ‘improved’ to achieve both conservation and livelihood benefits?”

“Good governance of a Protected Area” can be understood as a governance system that responds to the principles and values freely chosen by the concerned people and country and enshrined in their constitution, natural resource law, Protected Area legislation and policies and or cultural practices and customary laws. These should reflect internationally agreed principles for good governance. International agreements and instruments have set governance principles and values, such as the CBD, the Aarhus Convention, and others.

A number of international and regional processes have also been critical in setting this agenda, including the 2003 World Parks Congress. Drawing from these and field experience IUCN has explored a set of broad principles for good governance of Protected Areas, including:

- Legitimacy and voice – social dialogue and collective agreements on PA management objectives and strategies on the basis of freedom of association and speech with no discrimination related to gender, ethnicity, lifestyles, cultural values or other characteristics;

- Subsidiarity – attributing management authority and responsibility to the institutions closest to the resources at stake;
- Fairness – sharing equitably the costs and benefits of establishing and managing PAs and providing a recourse to impartial judgement in case of related conflict;
- Do no harm – making sure that the costs of establishing and managing PAs do not create or aggravate poverty and vulnerability;
- Direction – fostering and maintaining an inspiring and consistent long-term vision for the PA and its conservation objectives;
- Performance – effectively conserving biodiversity whilst responding to the concerns of stakeholders and making a wise use of resources;
- Accountability – having clearly demarcated lines of responsibility and ensuring adequate reporting and answerability from all stakeholders about the fulfilment of their responsibilities;
- Transparency – ensuring that all relevant information is available to all stakeholders;
- Human rights – respecting human rights in the context of PA governance, including the rights of future generations, indigenous peoples, local communities and private owners.”

1.10.3 Governance by indigenous peoples and local communities

As “community-based management” is explicitly mentioned as a goal and outcome of this project, in order to give background in the form of the up to date international status on discussion on concepts of governance by indigenous peoples and local communities, which are still evolving and differing around the world, the following texts are quoted, again from Dudley (2008). Obviously the international discussion and development in this field, which strongly points on indigenous peoples, is very much related to conditions in developing countries in Africa, South America or South-East Asia, which are not applicable to the South Caucasus:

“Some indigenous peoples wish to see their territories clearly distinguished from those of local communities. In other cases, indigenous peoples and local communities are co-inhabiting and co-managing areas, and in yet further cases indigenous peoples use the term “community conserved areas” for practical reasons, for example when the term “indigenous” is not recognised.

Although some of the PAs governed by indigenous peoples and local communities have been in existence for even thousands of years, their recognition by national governments and their inclusion within national PA systems is a recent phenomenon. Indigenous peoples’ PAs, indigenous peoples’ conserved territories and community conserved areas (summarised as Indigenous and community conserved areas or ICCAs) have three essential characteristics:

- The relevant indigenous peoples and/or local communities are closely concerned about the relevant ecosystems – usually being related to them culturally (e.g. because of their value as sacred areas) and/or because they support their livelihoods, and/or because they are their traditional territories under customary law.
- Such indigenous peoples and/or local communities are the major players (“hold power”) in decision making and implementation of decisions on the management of the ecosystems at stake, implying that they possess an institution exercising authority and responsibility and capable of enforcing regulations.
- The management decisions and efforts of indigenous peoples and/or local communities lead and contribute towards the conservation of habitats, species, ecological functions and associated cultural values, although the original intention might have been related to a variety of objectives, not necessarily directly related to the protection of biodiversity.

There is evidence that ICCAs that meet the PA definition and standards can provide effective biodiversity conservation responding to any of the management objectives of the IUCN categories, and particularly so in places where PAs governed by government are politically or socially impossible to implement or likely to be poorly managed. ICCAs are starting to be recognised as part of conservation planning strategies, complementing government-

managed PAs, private PAs and various forms of shared governance (see <http://www.iccaforum.org/>). But this is still more the exception than the rule.

Most ICCAs are at present not formally recognised, protected or even valued as part of national PA systems. In some cases, there may be good reasons for this – including reluctance of the relevant indigenous peoples and/or local communities to becoming better known or disturbed, for instance when the site has sacred values that require privacy or when the relevant indigenous peoples choose to manage their land in accordance with customary laws only. As countries move towards greater recognition of ICCAs, these sensitivities need to be kept in mind. Depending on the specific situation and the main concerns of the relevant indigenous peoples or local communities, appropriate government responses may vary from incorporation of the ICCA into the national PA system, to recognition “outside of the system”, to no formal recognition whatsoever. This last option should be selected when formal recognition may undermine or disturb the relevant ICCAs.

Most ICCAs face formidable forces of change, which they might be better able to withstand with the help of an official recognition and appreciation, especially when the most likely alternative may be exploitation, e.g., for timber or tourism. In these cases recognition within national PA systems, if ICCAs meet the PA definition and standards or other types of formal recognition, can provide indigenous peoples and local communities with additional safeguards over their land. This should be coupled, however, with the acceptance by the state that ICCAs are inherently different from state-governed PAs – in particular regarding their governing institutions. It should be noted however that formal recognition of ICCAs can bring new dangers, such as increased visitation and commercial attention to the site, or greater governmental interference. Indigenous peoples and local communities also worry that official recognition of ICCAs may get them co-opted into larger systems over which they have no control.

Although there is growing recognition of the positive role that ICCAs can play in maintaining biodiversity, there is also concern in the conservation community that “weak” ICCAs could be added to national PA systems as a cheaper and more politically-expedient alternative to other conservation options. There are also worries that, as societies change, community approaches to management may also change and some of the traditional values and attitudes that helped in conserving biodiversity might be lost in the process. Formal ICCAs that are unable to maintain their traditional conservation practices are worse than informal, unrecognised ICCAs.

Ultimately, and bearing in mind all the cautionary issues mentioned above, the recognition of ICCAs that fully meet PA definitions and standards in national and regional PA strategies is one of the most important contemporary developments in conservation. Some initial thinking on the criteria for recognition has already been published (Borrini-Feyerabend et al. (2004)) and further developments are expected.”

1.11 Governance of RA SPNAs

According to the RA Law On Specially Protected Nature Areas and the present practices all the Armenian SPNAs count to IUCN governance type A: governance by government, very similar to the assumptive description of most usual governance constructions as given above. The respective Armenian authorities are the MoNP, its BMA and the subordinated SNCOs. In the case of 14 State Sanctuaries the authority is with the Ministry of Agriculture and its Armenian State Forests SNCO.

It could be investigated on particular site level, where, to what extent and by what specific suitable construction governance could be shared between governmental actors in between different administrative levels and non-governmental actors.

2 Some Background on participation

In many societies the desire by the public to become more involved in decision making processes has increased over the past decades. Historically, the responsibility for decision making in public life has been vested in elected representatives (politicians) and government agencies. The shift towards public involvement in the decision making process is essentially a change in emphasis - from substance (what should government do) to process (how should choices be made). It is no longer possible for governments to make decisions in isolation of the people the decisions are most likely to affect. More and more governments recognise the value of involving local communities in decision making and to take a more active role in managing their local environments. State governments also now realise that community capacity building and enhancement of social capital can have significant flow-on effects in improving a State's environmental, social and economic well being.

Public participation - an integral component of Protected Area management:

Public participation is an integral component of Protected Area management. It is the role of Protected Area managers to promote and administer public participation in Protected Area management. It should be mentioned that most Protected Areas, speaking for the Republic of Armenia all of the existing, are a public asset and public participation is essential to ensuring they are properly managed and strongly supported by the public. As it relates to Protected Areas, the public -“the (members of the) society/ community in general” – has to be dealt with by Protected Area administrations in the forms of the following groups:

- Individuals;
- Neighbours to Protected Areas;
- Protected Area visitors;
- Private companies or individuals whose business relate to or could be impacted on by Protected Area management;
- Groups with specific concerns;
- State, national and international groups with an interest in conservation or the use of Protected Areas;
- Government agencies; ,
- Provincial, regional and local governments;
- Any group that expresses an interest.

For these groups in a way mechanisms to participate - to “have share, to take part in thing, with person” – should be considered and implemented.

Effective Protected Area management relies on a strong participation of stakeholders. However, even if there is a legal basis, political will and an institutional framework for it, stakeholder participation in Protected Areas is often limited both by a lack of know-how of participation mechanisms and communication barriers between Protected Area administrations and local communities. As a consequence, Protected Areas often do not succeed in fulfilling their full potential for biodiversity conservation and livelihood support.

In order to increase stakeholder participation in planning, management and benefit distribution of Protected Areas, it is necessary to develop clearly defined, transparent, and sustainable mechanisms. As well, local stakeholders have to be trained and their capacity has to be developed to make the most of participation opportunities.

Ensuring successful participation is a two way process, where both sides, the entity allowing the public to participate, and the public can learn and gain benefits. Benefits of robust public participation include, but are not limited to:

- Improved understanding of client expectations and user group needs;
- Improved understanding of Protected Area management units of conservation issues to be actively addressed;

- Improved understanding of Protected Area management units of the role and potential contribution of the public;
- Greater continuity in knowledge;
- The ability to build support for specific projects and measures in the public and to improve stakeholder relationships;
- Improved public understanding of the Protected Area management unit's responsibilities;
- Improved technical knowledge;
- Improved credibility of a Protected Area management unit within society or the community;
- Improved quality of decision making by Protected Area management units;
- Enhancement of social capital and flow-on social and economic benefits;
- Enhanced and informed political process;
- Greater compliance through increased ownership of a solution;
- Greater society advocacy for biodiversity protection;
- Greater access to community skills and knowledge;
- Improved community understanding of conservation issues and responsibility for conservation outcomes.

As disadvantages of public participation efforts may be considered:

- They can be time consuming;
- They may cause possible high financial costs;
- They need for staff training and capacity building within Protected Area management organizations;
- There may be difficulties in obtaining constructive debate when interest groups are entrenched in their views.

The following table out of a study done in Australia¹⁰ compares prejudice (myth) and surveyed materialized benefits of applied participation efforts in Protected Areas:

Myth	Truth
Empowering the community equals a loss of control of the PA managing unit	Inviting the community to participate in decision making builds community support for a project and adds to the PA managing unit's credibility
The community lacks the ability to grapple with the complexity of many issues	The Community holds a vast body of knowledge and can identify issues and solutions often overlooked by PA managing units
Public participation is time consuming and expensive	Properly structured public participation programs will help to streamline the decision making process and save money in the long run
Volunteers are a free labour force	Volunteers need to be appropriately resourced and managed in order to be productive
All community consultation projects are the same	Consultation projects should be carefully tailored to meet the needs of the program, stakeholders and the issue
Community involvement should provide instant results	Community involvement involves capacity building and should be viewed as a long term investment by a PA management unit

Table 1: Myth and truth on participation efforts in Protected Areas.

¹⁰ Parks and Wildlife Commission of the Northern Territory, 2002: Public participation in Protected Area management best practice project. Prepared for The Committee on National Parks and Protected Area Management, Benchmarking and Best Practice Programme, Australia

Different levels of participation:

Public participation can be seen as a continuum, extending from full government control to full community control. The lowest level of participation is compliance that, essentially, is the imposition of a decision on the community. Here the community has no choices or involvement in the decision making process, the decisions have already been made and the public is made to comply. At the other end of the spectrum is self-directed action, here the public is given full responsibility for decision-making and control of the process. Most public participation programs rest somewhere between these two extremes.

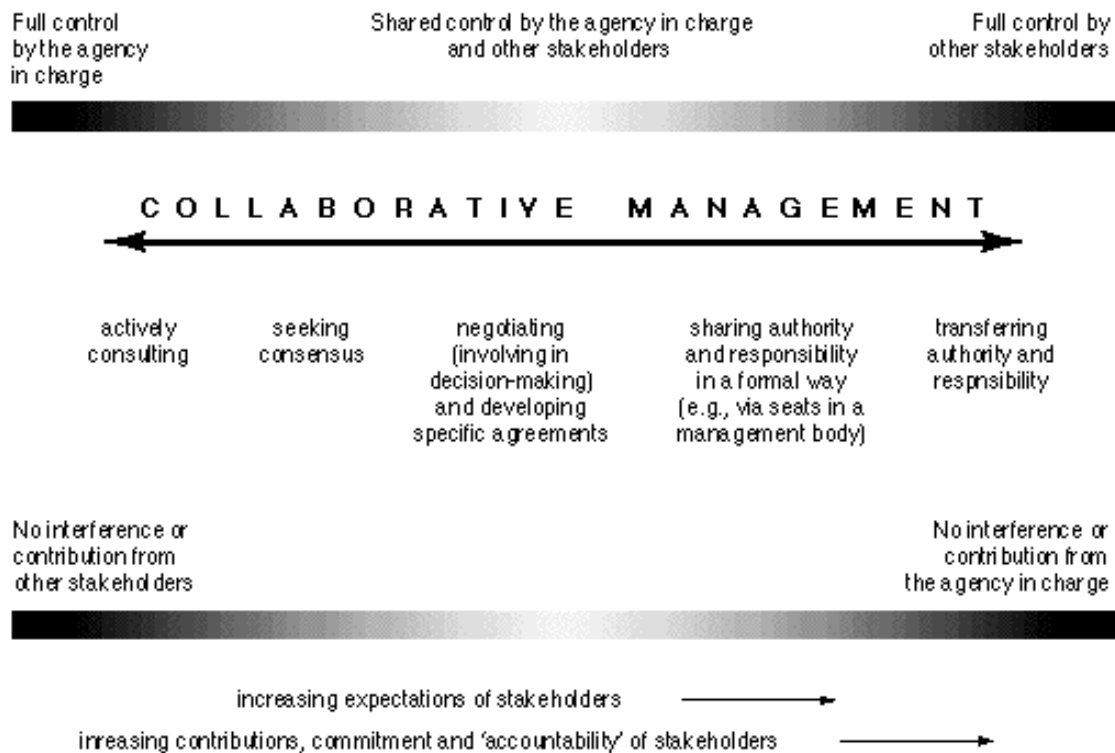


Figure 2: Participation in Protected Area management — a continuum (Source: Borrini-Feyerabend 1996)

The level of public participation in Protected Area management varies considerably among different countries and jurisdictions. The following are some of the major areas in which the public may be involved in Protected Area management:

- Provision of input into management planning and other policy documents;
- A wide range of volunteer activities, including e.g. fund raising, tree planting and weed control, visitor surveys, wildlife rescue, rehabilitation and surveys, walking track maintenance, historic site conservation, work in herbariums and botanical gardens, interpretation and education programmes, GIS and data collection and processing, staffing information centres and libraries, campground hosting/maintenance, receptionist and administrative duties;
- Stakeholder liaison through formal and informal mechanisms, including local management committees, advisory committees, community reference groups, community consultative committees, "Friends of the Protected Area" Associations (which function as a means of practical stakeholder support to a Protected Area management unit), stakeholder groups and industry liaison groups, and representation on statutory boards, advisory councils, Park Management committees and other legal entities, which all should have clearly defined Terms of References;

- Junior Ranger programmes, which will attract young people to a Protected Area and will build up their responsibility for it;
- Input into the nomination of new Protected Areas;
- Setting aside and managing private land for conservation purposes (voluntary conservation agreements, land for wildlife, etc.).

Principles of Best Practice in participation in Protected Area Management:¹¹

- Public participation is an integral component of protected area management.
- Protected Area management units seeking involvement of the public need to be open and clear about the extent of involvement intended in order to avoid creating false expectations.
- Public participation programmes should recognise the diversity of values and opinions that exist within and between communities and stakeholder groups.
- Good programme design is crucial to the success of public participation programmes.
- Specialised public participation techniques and training are required for programmes to succeed.
- The information content of public participation programmes should be comprehensive, balanced and accurate.
- A public participation program should be tailored to suit the situation at hand.
- A public participation process requires adequate time and resources – successful outcomes may be undermined where these are lacking.
- Protected Area management unit staff should be skilled in public participation design and processes.
- The community should be consulted about public participation design and process before the Protected Area management unit finalises its approach.
- To address the needs of specific groups, special participation techniques are required.
- Public participation programmes should aim to capture the full diversity of people within a community – not only people that are the most publicly active or socially capable.

It should be noted that even following an agreed public participation process, e.g. for a specific project or issue, it is unlikely that all participants will be completely happy with all decisions made. The important thing is that they are satisfied with the process.

¹¹ Following Parks and Wildlife Commission of the Northern Territory, 2002: Public participation in Protected Area management best practice project.

3 International examples and experience on participatory management models of Protected Areas

Strictly concentrating on the given title "International experience on Sanctuaries, with special reference on Sanctuary participatory management" the international consultant first did investigations targeting on governance and management of IUCN category IV Protected Areas in Austria, Germany, Estonia, Latvia, Lithuania, Czech Republic, Hungary, Poland, Sweden, Italy, the Netherlands and United Kingdom. The resulting picture can shortly be characterised as:

- In general there is a very poor situation in terms of available data sources and material on governance and management organisations, structures and procedures for IUCN category IV Protected areas.
- There is a multitude of different scenarios, in most cases presumably hardly comparable and applicable on RA Sanctuaries.
- Good practise examples for participative approaches and shared, collaborative management can rather be found in IUCN category II or V Protected Areas than in category IV types.
- Multiple use ecosystems (whatever might exactly be meant by this) would much rather be suitable to IUCN category V than to IV.

Based on the feedback and discussion of the draft version of this technical report it became clear, that the contents were rather expected to focus on community participatory management models and experiences in any type of Protected Areas than in particular on Protected Areas comparable to RA State Sanctuaries.

In consequence of this clearing, that not the Protected Area type "Sanctuary" should be the cornerstone, the performed search for data and investigations focused on Protected Areas according to IUCN Category IV Habitat/ species management area in Europe, based on the assumption, that RA State Sanctuaries would comply to this type of Protected Areas, turned out to be not beneficial to the finally expected outcomes of this technical report. Thus, new investigations were done in examples for international experience on participatory management of Protected Areas, with special considerations on applicability and comparability with the envisaged pilot Protected Areas of this project. Based on this the following selected examples are described in detail in the following:

3.1 Biosphere Reserve Grosses Walsertal, Austria

Basic background information:

The "Grosses Walsertal" is a sparsely populated mountain valley characterised by alpine farming in the westernmost Federal State of Austria, Vorarlberg. Approximately 3,500 people live in the six communities of the valley, which together encompass an area of little less than 200 square kilometres (19,200 hectares). The steep-side V-shaped valley has very little valley bottom. The mountain ranges and their slopes in the North and in the South of the valley are totally different in terms of geology: the northern part is characterised by soft, green mountains of the Flysch (sandstone), the southern part by the wildly romantic peaks of the high limestone Alps. The altitude ranges from 580 to 2,704 m above sea level. Nature is very rich and diverse in the valley and its surrounding mountain ridges.

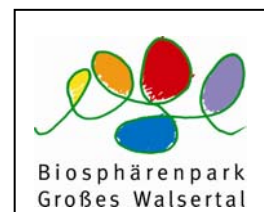
During the 1990-ies people of the "Grosses Walsertal" were seeking for a promising concept for the future development of their valley. Forestry production and traditional cattle breeding and cheese production based on high alpine transhumance pasturing were clear to give little perspectives (about 200 small private agricultural businesses, out of which about 100 practising organic farming). Chances for developing skiing tourism industry like in many other

Austrian mountain valleys were very much limited because of the specific natural conditions in this valley (about 180,000 overnight stays per year in the valley, which is comparably not much for Austrian alpine regions).

The six communities of the valley decided on their free will, to jointly implement the UNESCO Biosphere Reserve concept on their joint administrative territories (land property is besides community owned territories first of all in private hands). This decision was foremost driven by the aspect of using the Biosphere Reserve as a platform for a future socio-economic development, however, with respect to nature and environmental issues, rather than from nature conservation intentions. The valley was recognised by UNESCO as a Biosphere Reserve in November 2000. "Making use of nature without causing harm to nature and environment" is the philosophy of the Biosphere Reserve Grosses Walsertal, targeting on a constant development towards a model site which strives for sustainable development and seeks local answers to the question: how can we a balanced relationship between protection of the natural environment and the needs of man be created?

We are the Biosphere Reserve!

This slogan is given highest importance in the "Grosses Walsertal" and success in a strong bottom up approach and intensive participation efforts made this Biosphere Reserve a well known best practise example for mobilisation and active involvement of local people. The job of involving and motivating local people and the various interest groups early in the process was made easier by the facts that the area is of a manageable size and population is not large. Enthusiastic people have been involved from as early as the development and revision phase of the overall concept, 1999 – 2003. The mission statement of the Biosphere Park Grosses Walsertal was drawn up on the initiative of the Regional Planning Association Grosses Walsertal (which had been in existence already before) together with the population of the valley. More than 60 enthusiastic valley-dwellers worked together in workshops to formulate goals for the coming five years. The mission statement was presented to the public as part of a big Biosphere Park party. In November 2003 the revision and updating of the mission statement was completed by working groups from the Regional Planning Association committees and extended with the EMAS environment and sustainability policy. Interested parties also have always the opportunity to get involved in various projects and in the diverse committees of the regional planning association. The logo of the Biosphere Reserve was developed and selected via a painting competition held in the valley's schools. This was a significant contribution to anchoring the Biosphere Reserve firmly within the local population.



Fostering cooperation of people, stakeholder groups and the six concerned communities is a central goal and achievement of the Biosphere Park Grosses Walsertal. This proved successful in various projects in different branches and to different issues. One example is the joint "Planning Office" of the six communities of the Grosses Walsertal. This form of cooperation in an important sector of communal administration had long been planned for in the Vorarlberg Communities Act. With the opening of the Grosses Walsertal Planning Office it first became reality.

The goal of this administrative association is on the one hand to relieve the mayors and the local municipal offices of their workload in planning matters and to improve efficiency and legal quality of planning law administration. On the other hand, the move was intended to intensify support to those interested in building and to planning applicants in matters of law, energy and other technical and creative planning issues in cooperation with offices of the state and other institutions. The mayors retain their planning authority responsibilities and decision-making powers.

Legal basis and organisation of governance and management:

The legal basis for Biosphere Park Grosses Walsertal was created by implementing the instrument "Biosphere Park" according to UNESCO guidelines into the "Law on Nature

Conservation and Landscape Development of the Austrian Federal State of Vorarlberg 1997” by an amendment and the “Act on Establishment of Biosphere Park Grosses Walsertal”.

According to the latter, the legal entity of the Biosphere Park Grosses Walsertal is the Biosphere Park board of trustees which is identical with the main committee of the Grosses Walsertal Regional Planning Association (REGIO). This board, in which all the six communities of the valley are represented, acts as the governance structure of the Biosphere Reserve. It is responsible for the strategic leadership of the Biosphere Reserve. In case of decisions of strategic importance the authorities of the Federal State of Vorarlberg have to be informed and consulted. Communities have to inform the board of trustees ahead on relevant important issues. Members of the board of trustees are provided with support on content issues by expert advisory boards, which consist of persons with specific expertise nominated by the six member communities.

The Biosphere Park Management Committee was set up as the operational unit for the strategic planning and implementation of projects in accordance with the goals of the Biosphere Park and the respective UNESCO guidelines. The Biosphere Park manager and her colleague implement projects which support the Biosphere Park philosophy in cooperation with the population.

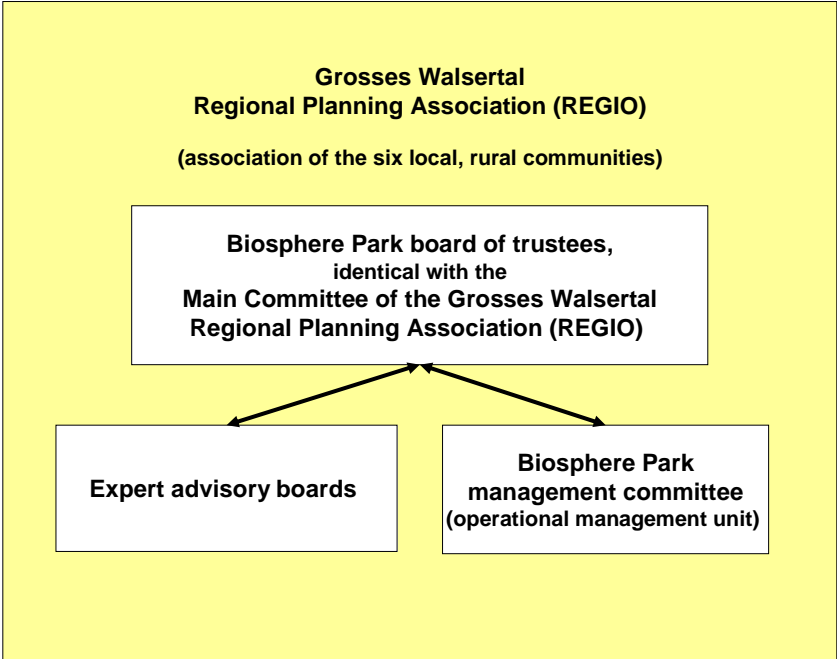


Figure 3: Organisation of governance and management of Biosphere Reserve Grosses Walsertal

Funding of the Biosphere Reserve:

Since 2005 the Biosphere Park Management Committee has received 100,000.- Euro annually as basic funding for its operations from the Government of the Federal State of Vorarlberg (represented by the Department for the Environment and Office for Future Matters of the Federal State’s administration). In addition, the six concerned communities pay 10 Euro per inhabitant (approximately 3,500 inhabitants) per year for this purpose.

Additional funding for projects and various initiatives could be gained by EU project advancements, awards and other donations as well as by private business sponsorships.

Nature conservation in the Biosphere Park Grosses Walsertal and zoning:

Nature conservation is a central and integral objective in a Biosphere Reserve. It has to be promoted and actively implemented in all the three zones of a Biosphere Reserve. However, in core zone areas nature conservation is the primary goal, guaranteed by a strict legally

stated protection regime. In the case of Biosphere Park Grosses Walsertal altogether six areas (high alpine grasslands and rocky peak regions, different types of mountain forests, a raised bog, and a stretch of a river landscape), which enjoyed strict protected status as nature conservation areas according to the Federal State's Law on Nature Conservation even before the declaration of the Biosphere Park, make a total core zone territory of about 4,000 hectares. These nature protected areas can be considered IUCN category IV Protected Areas.

Between the core zone and the development zone there is the buffer zone, with cultivated lands close to nature. In the valley Grosses Walsertal these are mostly alpine meadows, traditionally managed mountain pastures and mountain forests which together account for around 65 percent of the total area.

The development zone is the living, working and recreation space for the population. The goal is the development of an economic system which meets the demands of people and nature in equal measure. Socially acceptable production and marketing of environmentally friendly products contribute to sustainable development. In the development zone the typical cultural landscape was formed and influenced by particularly sustainable forms of land-use. Here, there are possibilities for the development of an environmentally and socially acceptable tourism but also for trades and services orientated towards environmental and social acceptability. The size of the development zone must follow appropriate conservation and planning controls. In the valley Grosses Walsertal all permanently settled spaces belong to the development zone.

The Biosphere Park management unit initiates and coordinates projects and is committed, amongst other things, to raising awareness and acceptance of ecologically important areas and to biological diversity. However, it is not the authority for conservation, which is further on with the Federal State represented by its district administration in charge. The Biosphere Park management unit does neither have mandate nor resources and capacities to do on ground conservation management. Control and implementation of regulations and measures according to the Federal State's Laws on Nature Conservation and Hunting as well as to the Austrian Federal Law on Forests are in the responsibility of semi-private forest and hunting guards. Frankly speaking, there is not really an active management of the Protected Areas embedded in the Biosphere Reserve.

Final statement:

Biosphere Reserve Grosses Walsertal can be taken as a best practise example for bottom up processes, active participation of local people, successful cooperation of local communities, environmental education and beneficial project implementation in the sphere of socio-economic rural development. However, as a result of the driving and carrying interests and backing entities, local communities, which first of all are focused on aspects of socio-economic development, it is rather not so active and a shining example in terms of nature conservation and active management of Protected Areas.

3.2 Donau-Auen National Park, Austria

Basic background information:

Connecting the capitals Vienna and Bratislava like a "green ribbon", the Donau-Auen (Danube-Floodplain) National Park preserves one of the last remaining major wetland environments on a large river in Central Europe. Here, the Danube is still free flowing over 36 km and is the lifeline of the National Park. The dynamic rise and fall of water levels mean that the wetlands landscape is constantly recreated and reformed. In this way, the Danube creates habitats for large numbers of animal and plant species, some of which are rare and endangered. On more than 9,300 hectares of area a river ecosystem can blossom free of commercial constraints, thus guaranteeing that future generations may also experience first hand its power, diversity and beauty. Since the founding of the Donau-Auen National Park in 1996 it has been possible to ensure a solid foundation for long-term development. The

riparian forests have been sheltered from commercial use in order to allow the ecosystem to exist without encroachments. Major hydraulic engineering projects have led to a turnaround in river works on the Danube. And with a broad range of guided excursions, National Park camps, the National Park Visitor Centre and other visitor facilities, the National Park, which is recognized by IUCN as a Category II Protected Area, has become an important centre for education and learning about the environment and conservation.

Designated as a National Park by Laws of the two Federal States of Lower Austria and Vienna, which share parts of its area, and Federal Law in 1996, Donau-Auen were recognized as a Category II Protected area, which should be administered primarily for the protection of ecosystems and for recreational purposes, by IUCN in 1997. By that time the area was looking back already on more than 20 years of struggling for protection and implementation of various conservation status, at least for parts of the total area (nature protection area and (old style) Biosphere Reserve for Viennese parts, landscape protected area and Wetlands of International Importance under the Ramsar Convention for the total area).

In the 1950s, construction of a nearly unbroken chain of hydroelectric power stations along the Austrian Danube commenced. This affected the ecology of the entire riverine system. Up to the early 1980-ies only one remaining free-flowing river section in a lowland area existed - the section of the Danube east of Vienna. In 1984, the planned construction of a hydroelectric power plant near Hainburg threatened to destroy the last remaining long section of the free-flowing Danube and its riparian forests. Calls to action by all conservation and environmental groups led to nationwide protests. As the operators of the power plant were about to begin construction, a peaceful occupation of the wetland forests at Stopfenreuth by thousands of people of all ages and social classes took place - the legendary "Hainburger Wetlands Sit-In". After many unsuccessful attempts by the police in December 1984 to clear the area of protesters, the Federal Government ordered a cessation of activities in order to reconsider the situation. Large-scale scientific studies were commissioned and surprising findings were laid bare. Yet the most important finding of all the studies was that the Danube wetlands in and around Vienna were worthy of National Park status. It was then determined that the presence of a power plant could not be reconciled with a National Park. After further years of fighting, preparing and planning for a National Park, on 27th October 1996, a treaty on the establishment and maintenance of a Donau-Auen National Park was signed by authorities of the Republic of Austria and the Federal States of Vienna and Lower Austria in accordance with the federal constitution. By that, the Donau-Auen National Park had officially been founded.

During the long period of fighting against a power plant and for a National Park, conservationists, scientists, activists and large parts of the Austrian public, supported by media succeeded in convincing politicians of the importance of safeguarding the river ecosystems east of Vienna by a high category protection status of international significance. However, although many local people supported the struggle against the power plant, large majorities of populations of some of the 13 communities which share part of the National Park area with their administrative territories were against the National Park. Its implementation in 1996 was definitely a top down approach, leading to protests and demonstrations against the National Park in its early days. Reflecting this strong opposition, a number of institutional provisions were stated in the legal basis of the National Park in order to assure formal participation of local and stakeholder interests (see descriptions below).

Land tenure and National Park communities:

Most of the recent total area of the National Park is property of the Republic of Austria. The Austrian Federal Forests stock company (100% shares with the Republic), supervises approximately 4,200 hectares, or around 45%, of the total area of the National Park. More State territory in the area is represented by the river Danube, under mandate of the Republic's waterways authorities, the "viadonau".

With an area of around 2,300 hectares (24% of the total), Vienna contributes to the Donau-Auen National Park.

About 400 hectares are a contribution of private land, with representation of ownership by WWF Austria on behalf of thousands of Austrians who donated money to purchase this area in order to let conservationists have a strategic “foot in the door”.

Only one local community out of thirteen, the municipality of Hainburg does so far contribute with about 100 hectares of its own property. Some smaller or even larger floodplain forests and wetland areas are designated to be included into the National Park once. Of course, same as with all the present contributors of territories, even the Federal Forests, only upon agreements with and compensational payments to the private or communal owners.

The city of Vienna is Austria’s Federal capital, one of Austria’s nine Federal States and even a National Park municipality. Thirteen other rural and urban communities in Lower Austria surround the Donau-Auen National Park and have part on the Park with their administrative areas. They by law are allowed to call themselves “National Park community”.

Organisation of governance, management and participation:

Governance and management structures:

The administration and operational management unit of Donau-Auen National Park is the Nationalpark Donau-Auen Company Ltd., a non-profit organisation formed, governed and financed by the Federal Republic of Austria and the Federal States of Vienna and Lower Austria. Its managing director is the National Park Director, who sits in the regular general assemblies with the company’s representatives from the Federal Government and the two Federal States. So, governance of the National Park is with these public administrative entities, which delegated part of their authorities to the Nationalpark Donau-Auen Company Ltd. However, law enforcement and other aspects of public authority are still with the State and provincial administrative authorities. Staff employed by the Nationalpark Donau-Auen Company is responsible for a variety of tasks in order to plan, design and implement management measures. About up to 30 specially-trained National Park Interpretive Rangers, hired on a freelance basis, are engaged in educational activities and visitor information. Some of them have also been sworn in as wardens and support the National Park Rangers of the two involved forest management units on the grounds of the Park.

Entities of two important land owners were integrated into the management architecture of the National Park: the “Austrian Federal Forests Enterprise in Donau-Auen National Park” and the “Lobau National Park Administration” of Vienna Municipal Department 49 (Forestry Office and Urban Agriculture). The employees of these two independent entities carry out forestry and game-control related duties, maintain infrastructure and the network of trails, and together with the National Park Company are responsible for supervising the area, developing and performing the park’s educational programmes and guiding to visitors. In order to coordinate their management activities with the obligations and tasks of the National Park Company, the Heads of these two entities hold regular sessions with the National Park Director, altogether building the Management Board.

Participation structures:

For safeguarding of regional stakeholder interests, the Federal State of Lower Austria anchored a special committee in the Lower Austrian National Park Law which is called “Lower Austrian National Park Advisory Board”. This board does not have decision making authority. Its members are appointed for a period of six years by the Federal State’s government. The make-up of members is as follows:

- One representative of each of the 13 local communities in Lower Austria, which have part on the National Park with their administrative areas;
- Two members each of the group of land owners directly affected by the National Park and who are to be named by the Lower Austrian Provincial Agricultural Chamber;
- Two representatives of the Lower Austrian provincial hunting association;

- Two representatives of the Lower Austrian provincial fisheries association;
- One representative of the Lower Austrian Chamber of Commerce; and
- Five representatives of important nationally operating conservation and environmental organisations active in Lower Austria.

For issues concerning hunting and fisheries, specific sub-boards of the Lower Austrian National Park Advisory Board were established.

In order to advise the National Park administration on fundamental issues related to the Viennese part of the Protected Area, Vienna has anchored its own National Park Advisory Board in the Viennese National Park Law. This board does not have decision making authority. Members of this advisory board are appointed for a period of six years by the Viennese government. The Viennese National Park Advisory Board is composed as follows:

- One representative each of the Vienna Chamber of Commerce, the Vienna Agricultural Chamber, and the Vienna labour representative organisation;
- One representative each of the Vienna provincial hunting association and the Vienna fisheries board; and
- Five representatives of important nationally operating conservation and environmental organisations active in Vienna.

Task forces of the Viennese National Park Advisory Board were formed for fishing, public relations and visitor management.

The Lower Austrian National Park Law allows the creation of local advisory boards to enable participation of the individual National Park communities. Members should be representatives of the community, land owners and/or beneficial owners, as well as representatives of the National Park administration. Recommendations having to do with locally relevant matters and those which involve the National Park should be turned over to the Lower Austrian National Park Advisory Board or the National Park administration. The most urgent issues - with varying levels of intensity - have had to do with hunting, fishing, recreational use and the trail network on the National Park territory. Some local advisory boards have established task forces or have the capability to do so; following the creation of the Lower Austrian National Park management plan, some have discontinued their activities.

A Scientific Advisory Board has been established to provide expert advice to the National Park administration. The board consists of a chairperson, a deputy chair and a maximum of fourteen additional members. Experts from the fields of zoology, botany, limnology, agriculture, forestry, urban planning, landscape architecture, and water management are appointed and dismissed at the recommendation of the Nationalpark Donau-Auen Company. Members may serve a maximum of three years, whereby a re-appointment is possible. As in all National Park advisory boards, members act as volunteers and are not paid for their work. For special issues (such as terrestrial or aquatic ecology, river engineering, monitoring, visitor management etc.) task forces have been established.

According to the Lower Austrian National Park Law the National Park administration has to perform an annual "National Park Forum", open to the concerned and interested public.

Final statement:

Donau-Auen National Park is an example for Protected Area governance by government, organized with delegation of many typical governance and management issues to a non-profit organization, which is steered and financed by Federal and Federal State governments. Some aspects of public authority such as law enforcement and punishment of violations of regulations are kept with public authoritative institutions (e.g. like the district administrations of three Lower Austrian administrative districts).

For participation of local communities and local or regional stakeholders, a number of representative institutions are foreseen and legally stated. All these do not have decision making authority and they are not taking part in the management of the Protected Area.

3.3 The Raised Bog Nature Park of Schrems, Austria

Basic background information:

According to the Lower Austrian Law on Nature Protection the government of the Federal State may assign the status “Natur Park” (Nature Park) to areas which hold a Protected Area status like Nature Protected Area or Landscape Protected Area according to the same law.

In Lower Austria there are 22 existing Nature Parks. They, besides of course various ecosystems and habitats represented, differ a lot in many aspects, such as size, land tenure, governance, administration and management. As much as they are different in most cases, they usually (however, there are slight exceptions) have in common, that:

- They were created in the intention and still are intended to first of all provide recreation and “nature contact” space for populations and visitors, and in some cases noteworthy educational activities, rather than providing much and strong conservation activities.
- They are rather poorly provided with financial resources and therefore most likely lack substantial capacities and staff, in particular for professional conservation management.
- The status “Nature Park” on its own does not provide any specific protection regime.

Some of them, among these the “Raised Bog Nature Park of Schrems” are very similar, as:

- Their size is relatively small.
- Their land owner, governing and managing entity is one single community.

The “Raised Bog (or: High Moor) Nature Park of Schrems” comprises former peat banks in various stages of regeneration. These transitional stages are particularly attractive as a landscape, and offer a wide variety of animal and plant life. This is the largest peat moor in Lower Austria covering an area of 300 hectares of which 119 hectares have been designated a Nature Protected Area. By showing in an impressive manner how man and peat moor have interacted through the centuries, not always without problems, this Nature Park offers a unique attraction. Visitors experience at first hand how nature re-conquers former peat banks without endangering the plants and wildlife of the moor. The former peat banks are covered by water along which the 4.5 km long High Moor Hiking Path leads, and the former drainage ditches provide an optimum habitat for the extremely rare moor frog. Bladderwort, a small underwater plant feeding on small animals can also be observed. Bog iris and yellow water lilies can be seen on the free water surfaces of the pools. Sundew, one of the few carnivorous plants in mid-European flora can still be found in the Schrems moor. The about 20 m high “Sky Ladder” offers a special view and particular insight into the fascinating landscape of this peat moor.

The “UnderWaterWorld and Ramsar Centre Schrems”, a visitor centre next to the area of the raised bog, focuses on the experience of water in all its dimensions. The Upper Waldviertel with its marsh areas, meandering stream courses and vast wetlands represents the ideal location for the UnderWaterWorld. To the visitor the centre is providing exceptional insights into the world of water: Water fleas, insect larvae and small fishes are bustling in the aquariums of the under water zoo. In the outdoor area, frogs, dragonflies and otters can be observed in their natural habitats. Water terraces, ponds and creeks show the singularity of the Waldviertel landscape.

Governance, management and typical specific problems:

As mentioned above, the area of the “Raised Bog Nature Park of Schrems” is property of the small urban municipality of Schrems and the Nature Park is run by this municipality. However, in general suffering with serious structural economic problems, the small town of Schrems does hard in covering the running costs for this site in order to keep it attractive to visitors. The creation and implementation of the UnderWaterWorld and Ramsar Centre by a specially created enterprise, the ‘Ramsar-Stadtgemeinde Schrems OEG’, together with the municipality of Schrems and WWF Austria, and of course impossible without additional funding by EU and Federal State’s project funding means, was intended to provide a long-term working attraction for touristic visitors. Although well done and modern in concept,

design and implementation, already a few years after its opening the visitor center turned to face an extremely critical, existence threatening economic situation. Not surprising in a way, as the location is quite distant to important sources of visitors (more than 1 ½ hours car ride from Vienna, which is e.g. too far for a school classes one day excursion) and nowadays there is quite a lot of concurrence by a large number of interesting, attractive sights in Lower Austria and around Vienna. And for guests from closely neighbouring Czech Republic it might still not be that attractive because of language barrier etc.. Meanwhile, WWF is no more involved in the construction and its funding. As the management of the visitor centre was meant as well to take management tasks for the close Nature Park, economic problems of one component weakens the other as well. So, there is – as in most Nature Parks in Lower Austria and all over Austria - a significant lack of financial and personnel resources.

Final statement:

“Raised Bog Nature Park of Schrems” and the closely related “UnderWaterWorld and Ramsar Centre Schrems” may stand for small scale Protected Areas, run and managed by one or a few communities, usually lacking sufficient long-term funding capacity for the necessary or wished management and permanent attractiveness for visitors. In terms of the visitor centre this example reminds to be extremely careful with design and expectations of visitor facilities which are relatively cost intensive in implementation and maintenance.

3.4 Alpenpark (Alps Park) Karwendel, Austria

Basic background information:

The Karwendel is the largest range of the Northern Limestone Alps, comprising four chains, stretching from west to east, between the Isar and Inn rivers and the Achensee (lake), with major parts in North Tyrol (Austria) and minor parts in Bavaria (Germany). The area counts 125 peaks of altitudes of above 2,000 m, reaching up to 2,749 m. Peaks and ridges are in most cases rough shaped and there are extremely steep rock faces and slopes. Besides many other remarkable qualities, the area gives habitat for a large population of Golden Eagle, shows high diversity in forest communities and ecosystems and is valuable for an untouched alpine river upper stretch. Chamois is common and Alpine Capricorn was successfully reintroduced.

Both, the Austrian and the Bavarian parts are under nature protection status. The Tyrolean part of the Alpenpark encompasses an area of 727 km² and is one of the largest Protected Areas of the entire Eastern Alps. The directly bordering Bavarian Nature Protected Area Karwendel and Karwendel Approaches covers some additional 190 km². These Protected Areas are designated as a transboundary Nature 2000 European Protected Area, both according to the Fauna-Flora-Habitats Directive and the Birds-Protection Directive of the European Community. The Alpenpark Karwendel goes back to one of the first (as soon as in 1928) implemented Protected Areas of the Eastern Alps. Recently it integrates as many as 3 Nature Protected Areas, 2 so called Rest Areas and 6 Landscape Protected Areas, all according to the Tyrolean Law on Nature Protection. In 2009 the Alpenpark Karwendel was declared a Natur Park by the Tyrolean Federal State government.

The area of the Alpenpark Karwendel is well known and frequented with Alpinists, both from the Tyrol and Bavaria. Alpine hiking, rock-climbing, ski-touring and mountain biking are very popular in the area, which is extremely close and quite easy to access e.g. for people living in Innsbruck and the densely populated Inn valley. A number of alpine huts, a well developed network of trails and climbing routes are available and well maintained by Alpine Clubs. Along of some of the roads approaching the area individual car traffic, moving and parking, causes serious trouble, in particular on weekends, when people go there for leisure time and alpine outdoor sports activities. This causes a lot of trouble to land-owners and those in charge of on the ground management and conservation.

Organisation of governance, management and participation:

Since the beginning of 2008 the Alpenpark Karwendel Association is in charge of governance and management of the Tyrolean part of the Karwendel. Members of the Association are:

- The 15 Austrian communities which share part of the area of the Alpenpark;
- The 5 concerned Tourism Associations (which are backed by the communities);
- The Austrian Federal Forests stock company (100% shares with the Federal Republic of Austria), represented by its local Forest Enterprise, representing the by far largest land owner;
- The Austrian and the German Alpine Associations, representing large numbers of members in terms of conservation interests and as well as the interests in alpinism and outdoor sports;
- The Chamber of Agriculture of the Federal State of Tyrol; and
- The Federal State of Tyrol, which initiated the foundation of the Association, represented by its Department of Nature Protection.

The governing Steering Committee of the Association is composed by a defined mix of representatives of the members: 2 of the Federal State of Tyrol, 4 Heads of communities, 3 of the Tourism Associations, and 1 each of the Chamber of Agriculture, the Alpine Clubs and the Austrian Federal Forests.

The operational executive management unit is headed by an executing manager, who works together with a team of three permanent staff and at present 12 freelancing interpretive rangers, who implement educational activities on the ground.

The intention of the Association is a stronger involvement of local communities and land owners and by this in the end a stronger acceptance for the Protected Area.

Mission statement, work-programme and funding:

The non-profit Association is targeted on the development, fostering and management of the Alpenpark Karwendel, both, materially and immaterially. It shall help raising awareness on alpine nature protection by suitable measures for conservation, maintenance and development of the Karwendel nature and cultural landscape, by public relations and by supporting education and scientific activities and close to nature forms of use in agriculture and forestry, handy-crafts and tourism in the Alpenpark region and in the communities.

In 2009 a work-programme was adopted which will be the guideline for a mid-term focus on nature conservation, visitor programmes and awareness raising activities.

Transboundary cooperation with the Bavarian part of the Karwendel is still not always easy.

Funding of the Association is based on membership fees, subsidies of public territorial authorities and of public and private entities, donations, remunerations for events, guided tours and excursions and selling of publications, as well as for consulting and project support and other donations and income sources.

Final statement:

Alpenpark/ Nature Park Karwendel is an example for well organised and structured cooperation of a relatively large number of communities, land-owners and stakeholder organisations, including, on initiative and with strong support by the concerned provincial government and its administration. Tourism, recreation, agriculture forestry and other types of use-interests as well as public relations, awareness raising, education and scientific activities play an important role in the range of activities of the association. However, active nature conservation is not less a central issue to be targeted.

4 Considerations on models for governance and management of pilot Protected Areas in the frame of the project “Developing the Protected Area System of Armenia”, with special reference on participatory management

During the international consultant’s visit to Armenia, October 25th to 29th 2010, the UNDP project manager and the commissioned national experts of CEP SNCO and WWF Armenia did a lot of discussing with the international consultant on potential options for governance and management of the three pilot Protected Areas in the frame of the project “Developing the Protected Area System of Armenia”. In this chapter contents and results of these discussions and the international consultant’s additional considerations are presented.

4.1 Zangezur Sanctuary

Among the three selected pilot areas in the frame of the project “Developing the Protected Area System of Armenia” Zangezur Sanctuary is the only one which is already in existence. This new Protected Area was established on October 15th 2009 by the RA Government Decree No. 1187-N.. The covered area of a little more than 17.000 hectares is all high alpine territory in State property along the Zangezur Ridge and southern slopes of the Bargushat Ridge. To its west the area is directly bordering Ordubad National Park in Azerbaijan’s Nakhichevan area. Along the State Border RA borderguards are present in the Sanctuary. Whereas possible future mining interests and infrastructure development have been taken into account when delineated, resulting in cutting off some areas with potential for being included, other threats to the Sanctuary’s environment like poaching and overgrazing are potentially challenging. A number of rural communities and Kajaran mining town are neighbouring the State Sanctuary with their administrative territories.

According to the RA system of Specially Protected Nature Areas the category “State Sanctuary” was chosen, suggested in order to allow limited grazing of domestic animals. Otherwise, the category State Reserve might have been worth a consideration because of the remoteness of the high alpine areas and the limited human-use interests and impacts.

The more that in the case of Zangezur the area of the Sanctuary is in total State owned, it is legitimate, that the Republic of Armenia represented by the MoNP holds the responsibility, decision-making and management authority about the Protected Area. Governance and ownership are in one hand. And as well financing of the necessary management for this large Protected Area is a matter of the State.

Strong arguments for the decision to give the management of the new established Sanctuary under responsibility of the existing Shikahogh State Reserve SNCO are, that this entity proved to be successful in implementing effective conservation management. Shikahogh State Reserve SNCO is experienced in managing another State Sanctuary, however, Plane Grove can hardly be compared to Zangezur in several aspects first of all not in size of area. Most likely an intention might have been to be efficient by using synergies by putting the management of Zangezur Sanctuary under the responsibility of the well established State Reserve administration. However, considering the distance between Shikahogh State Reserve and Zangezur Sanctuary, in terms of compactness of territory under mandate the chosen solution might be questioned. Doubt in such a direction might be met already by the establishment of a separate office in Kapan and new additional staff for the management of Zangezur Sanctuary by Shikahogh State Reserve SNCO. The implementation of decentralised ranger stations closer to the area of Zangezur is already in preparation.

In terms of working with adjacent local populations Shikahogh State Reserve SNCO is experienced and very successful. This experience and tested approach is another good argument for the selected management solution. The international consultant does not have information at present on possibly planned activities for addressing and working with people living close to Zangezour Sanctuary areas. In general, thinking of participation of people around the Sanctuary, its large area and specific shape has to be considered. Not only communities at the Southern approaches of the territory should be addressed, but as well such quite distant in the North like Tatev.

In order to give structure and mechanisms to participatory approaches, different options of organisational arrangements with different extent of active involvement of local communities could be considered, as the following examples. However, authority, governance and management would stay with the State and its on the ground entity, the SNCO in charge of representing the authority and taking care for the necessary conservation management:

- A “Sanctuary forum” could be stated legally (or only on voluntary basis by the management authority). In regular terms, e.g. annually, the Sanctuary managing SNCO would invite the concerned public (populations of adjacent communities) to inform about relevant activities, developments, success or problems in bilateral issues, etc. and to hear local people’s and communities’ ideas, problems, wishes and complaints concerning the Sanctuary in their neighbourhood. Local people and communities would not have the right to make decisions and to force the Sanctuary managing entity to any action. But, the Sanctuary administration would have to meet the obligation to communicate and listen to adjacent communities and people in an institutionalised form in order to support trying to jointly find solutions of problems of bilateral concern.
- In addition to an above mentioned “forum” a “Sanctuary council” could be established, as well on legal basis or even only on voluntary basis. Again different detailed options can be considered for designing the circle of attendees and extent of active influence on the management of the Protected Area. Most likely, such a council should be serviced (taking minutes, etc.) and called for sessions and meetings by the Protected Area administration unit. The chair of council could be the Director of the SNCO in charge of the management of the Protected Area, or another council member upon election or appointment (both most likely for defined terms). Besides the Head of the managing SNCO council members would most likely be the Heads of all adjacent communities, representatives of the provincial administration and possibly as well representatives of relevant local or even national environmental NGOs, stakeholder groups, and representatives of local branches of State administration like e.g. the regional structure of the State Environmental Inspection. Because of the specific situation of Zangezour as well the border guards could be represented. Such a council could be designed in different ways, ranging from only consultative up to (at least in specific issues) decision making competencies.

Both, considerations on cutting off further areas and enlarging the area of the Sanctuary substantially were reported. Of course, from the conservation point of view, only the second idea should be furthered. Such additional territory could in principle be as well community land. If inclusion of community (or even private) areas once happens, this would most probably take adjustments in the recently implemented governance and management regimes.

With the municipality of Kajaran Zangezour Sanctuary has a remarkably special neighbour. On one hand side this urban community is suffering a lot from negative impacts caused by and related to mining industries. On the other side it has, in comparison to most other communities in Armenia, relatively big financial capacity for environmental activities and is very active in implementing such. There is even the idea of establishing a small community managed Protected Area based on the community’s own capacity.

At the moment, the international consultant does not yet have more and sufficient information on Zangezour Sanctuary for further, more detailed and specific considerations and proposals.

4.2 Planned Khustup Sanctuary

A second pilot area in the frame of the project “Developing the Protected Area System of Armenia”, as well in South Syunik Marz, is Khustup Sanctuary, which does not yet exist but still is in planning status. This Protected Area is envisaged to be established around and including Khustup peak, south-west of Kapan town. Intended to be covered are foremost high alpine grasslands and rocky terrains, all of them in State property. However, there are as well strong considerations to enlarge the territory for large forest areas downslopes to the west, north and east of Khustup massive, partially possibly even as far down as to Voghi river. These considered forest areas are as well State property, under management responsibility of the Armenian State Forest’s Kapan Enterprise. In any case, the Sanctuary area would directly border the strictly protected areas of Shikahogh State Reserve.

According to the RA system of Specially Protected Nature Areas the category “State Sanctuary” was chosen for this envisaged Protected Area, suggested in order to allow limited grazing of domestic animals, recreational and mountain tourism activities. The State Sanctuary would as well include a sanctuary, a cave which is considered by local people a holy place and therefore visited by people quite regularly.

As far as the present information available to the international consultant only State territories are envisaged to be included. Thus, similar to Zangezur Sanctuary it is legitimate, that the Republic of Armenia represented by the MoNP is considered to hold the responsibility, decision-making and management authority about the future Protected Area. Governance and ownership would be in one hand. And as well financing of the necessary management for this large Protected Area would be a matter of the State.

The arguments for giving the management of the future Khustup Sanctuary under responsibility of the existing Shikahogh State Reserve SNCO are even much stronger than in the case of Zangezur, because the two Protected Areas would directly border each other. From a geographical point of view the implementation of Khustup Sanctuary in whatever size and shape would come close to an enlargement of the State Reserve area, however with a different, in some aspects expected less strict management regime. All the other arguments supporting the solution to make Shikahogh State Reserve SNCO the management unit of Khustup Sanctuary are as mentioned already above for Zangezur Sanctuary: the entity ...

- is successful in implementing effective conservation management;
- is experienced in managing another State Sanctuary, Plane Grove;
- would allow an efficient management of Khustup Sanctuary by using synergies with the management of Shikahogh State Reserve;
- has already established an office in Kapan, the urban community of crucial importance for the northern approaches of Khustup massive, and is well respected in Kapan and with the provincial administration of Syunik;
- is well experienced and successful in working with adjacent local populations of Shikahogh State Reserve, which would (e.g. in the case of Tsav) be direct neighbours of Khustup Sanctuary areas.

Khustup Sanctuary, although not yet in existence and regardless its size and shape, was recently strongly recommended to be part of an envisaged Shikahogh Biosphere Reserve according to UNESCO guidelines. It is up to an ongoing Feasibility study commissioned by the RA MoNP with support and funding by KfW Development bank on behalf of the German Federal Government to develop options for governance and management organisation, structures and mechanisms for this future Biosphere Reserve. Upon a following decision these would be built up during the implementation phase of so called “Shikahogh Project”, targeting on the establishment and long term development of a Biosphere Reserve recognised by UNESCO. Participatory approaches are among the core issues of such a Biosphere Reserve. If Khustup Sanctuary is part of it, the Biosphere Reserve participation

structures and mechanisms would as well include their application concerning this Sanctuary.

4.3 Planned Gnishik Protected Area

In difference to the other two selected pilot areas in the frame of the project “Developing the Protected Area System of Armenia” Gnishik region could be visited by the international consultant in company of the UNDP project manager and the commissioned national experts of CEP SNCO and WWF Armenia for two days during his visit to Armenia, October 25th to 29th 2010 (see the international consultant’s report on this mission, including the excursion to Gnishik region).

Same as Khustup Sanctuary, Gnishik Protected Area does not yet exist, but after at least 6 years of planning it is still in this process. However, it seems that there is now a relatively clear tendency and a clearly positive attitude towards the establishment of a Protected Area in this region, not only on national, but as well on provincial administration and local levels. At least as long as the envisaged Protected Area guarantees active participation of local communities in its management (compare several statements of the Governor of Vayots Dzor Marz and of the Heads of at least four concerned communities).

4.3.1 Some characteristics of Gnishik region

Gnishik Protected Area planning region differs a lot in almost all relevant aspects (and as well in natural conditions, ecosystem types, vegetation, geology, landscapes etc.) from Zangezur and Khustup situations:

Area and land tenure:

Except relatively small, but unfortunately key areas in State (e.g. Noravank canyon and valley) or private (e.g. church territories around Noravank monastery, territories procured by a private hunting tourism enterprise) property, almost all of the minimum 12.000 hectares (possibly even more up to about 20.000 hectares) of the considered area is owned and managed by self governing rural communities. These communities differ very much in the extent of area which is considered to be part of the future Protected Area as well as in population (in a range of a few hundred up to more than 2.000 people) and economic situation and potentials. In general, the socio-economic situation and livelihoods of people is not at all satisfying, in particular in the remote and high lying villages.

Gnishik community (comprising the village of Moshrov and the almost abandoned settlement of Gnishik) and Khachik would, according to recent planning, be covered by the Protected Area with their total territories. The communities of Areni and Agharakadzor would contribute larger parts of their areas. Possibly the community of Arpi would as well contribute with comparably smaller territories.

Similar to Zangezur, Gnishik area would have a long State border line with Azerbaijan’s Nakhichevan area, of course resulting in presence of military border guards.

In comparison to the other two pilot Sanctuaries in South Syunik Marz Gnishik region is well accessible from Yerevan, because it is much closer. The main highway connecting Yerevan with the South of Armenia would be relatively close to a Northern border line of a Protected Area. Of course, opposite to the advantage of good accessibility, dense and heavy transit traffic on this main road causes some impact to adjacent villages and might at least potentially have some habitat cutting effects.

Landscape, traditions in land-use, conservation and cultural values:

Much more than in Zangezur and Khustup, where pasturing was (and this only in parts of the area) more or less the only significant land use (although much more intensive during Soviet period), Gnishik region shows a cultural landscape. Wide areas were used as arable lands, much of this only possible after creation of artificial field terraces and with heavy agricultural

machinery. Since the break down of Soviet Union most of these areas are out of use and now, although mostly privatised, barren lands. Large of these areas as well as abandoned former vine-yards (e.g. in Noravank valley) are of high importance in terms of conservation of agro-biodiversity. On the other side, there are large areas of steep alpine grasslands with a high percentage of rocky patches. Such areas are optimum habitats for flagship species like bezoar goat, brown bear or even the leopard and for a number of raptor and vulture species. For such large mammals and birds Gnishik region would be of high importance as a stepping stone area for migration in eco-regional terms. The more, the region is very rich of rare and endemic plant species and comprises remarkable geological formations, caves and mineral springs. Noravank monastery and the church of Areni are the most prominent, but not the only cultural sights, which already play a significant role for tourism, however with little generation of income and benefit for local people.

Tradition and experience in nature conservation and with Protected Areas:

In Gnishik region there has never been a Protected Area, yet. Local people, community administrations and in comparison to others as well the provincial administration of Vayots Dzor have no or very little experience in nature conservation and in “living with” Protected Areas. However, the area around Noravank canyon was recognised as an Important Bird Area (which is not a legal protection status or legally stated Protected Area category) and the bottom of Noravank canyon and valley is under a State cultural conservation status (under mandate of the RA Ministry of Cultural Affairs). There is no local or regional structure, organisation or mechanism, experienced and active in the field of nature protection, to build on.

Poaching:

All community representatives reported poaching as a serious problem on their territories. Illegal hunting is not done by local people. They suffer from these practices and dislike people from elsewhere coming here for shooting bezoar goats and other strictly protected large mammals. Local and even provincial authorities can not stop this.

4.3.2 Considered types of Protected Areas

For some years planning and preparation efforts for a Protected Area in Gnishik region were focused on and promoting the establishment of a National Park. This category of Protected Area was strongly rejected by local people and their representations on community and provincial level. Local people might have feared a lot of State intervention and losing autonomy and influence on their community lands in case of establishment of a National Park. On the other side, according to the recent legal situation a National Park would only be possible to implement on State territories (a link of land tenure and Protected Area category, which should be considered to be amended in near future). And, on opinion of the international consultant, taking into account the large areas of quite intensively modified and impacted landscape (thinking for example of the wide slopes with field terraces and former, but still potential, largely privatised arable lands), pasturing interests and even settlements in the area, it would probably not have been the optimum area for implementation of the main management objectives of IUCN category II National Park.

After the failure of the National Park approach the initiatives towards a Protected Area in Gnishik region are now sailing under the flag of Sanctuary according to RA legislation. Again the link of State property (indicated by the full term according to the law “State Sanctuary”) and the category is not furthering. Even more, with or without compliance with IUCN category IV main management objectives and criteria, which is suggested for RA Sanctuaries, the international consultant would not support the idea of calling the total planning area in Gnishik region a Sanctuary. He consciously hesitates using the term “Sanctuary” for what is in planning process and on discussion and encourages using the term “Protected Area” instead.

The so far obviously followed option, to call all the area a Sanctuary, but to separate areas of different use- and impact intensities and, on the other side, of different conservation regime strictness by defining different zones within the Sanctuary, was discussed with the national experts.

As an alternative to this approach, the international consultant recommends considering a combination of different Protected Area categories under the umbrella of a uniting and identification supporting label. This could look like described in the following:

The project team agreed that large parts of a Gnishik Protected area would best fit to IUCN categories V and VI. On the opinion of the international consultant these areas could be taken as a landscape matrix and be given this status. Important to mention is, that the present RA legislation on Protected Areas does not at all foresee Specially Protected Nature Areas which would fit to IUCN V or VI categories. The project team totally agreed that this is a clear deficit of the present RA legislation on Protected Areas which should be corrected by an amendment to the law.

These parts embedded in the landscape matrix, which are of highest nature and habitat value and protection demand could be categorised with strict protection status. According to the IUCN system category IV would be rather appropriate for larger areas (e.g. wide rocky ridges and slopes, which are habitat for bezoar goat, bear and leopard). In addition small scale, punctual habitats of endemic plant species might, in case they would not be covered by category IV areas anyway, be strictly protected by implementing category III Nature Monuments.

However, such a “combined Protected Area cluster” solution would need an umbrella label, a uniting roof, which would help integrating the participating communities and populations. They should all together work on the development and in the end benefit from and be proud of their joint Protected Area. This label would help promoting the total region as an area of excellence.

A suitable umbrella label for the combination of the above described strictly protected category IV and III areas, embedded in category V and/ or VI areas, would be the UNESCO Biosphere Reserve concept. Of course, at present this does as well not exist in the RA legislation. However, the ongoing initiative on an envisaged Shikahogh Biosphere Reserve should be promising to pilot the legal implementation of this modern concept, which combines nature conservation efforts with improving people’s livelihoods by targeting a sustainable socio-economic development. Recommended by the UNESCO guidelines for Biosphere Reserves, IUCN category I, II, III and IV areas are suitable for guaranteeing the strict conservation regimes required for core zones of a Biosphere Reserve. Areas in the status of IUCN V are mentioned as suitable for buffer zones and (at least) parts of the outer transition area of a Biosphere Reserve. The outer transition area may as well comprise territories without any nature protection status (e.g. rural or even urban settlements and areas under agricultural or forestry use). Facing the situation of Gnishik region, this seems to be an option which should be considered strongly.

In many countries often called “Nature Parks” provide a similar approach like Biosphere Reserves for complexes of cultural landscapes with high nature values. However, this integrative cluster type of area label lacks international reputation and thus, often proves less promising for supporting socio-economic development in line with tangible improvements for nature conservation. In Armenian legislation this label does as well not exist at present.

4.3.3 Considerations on governance, funding and management

4.3.3.1 Fundamental considerations

On the local communities interest and motivations to participate:

It is not surprising and legitimate, that in the case of Gnishik region the local communities want to participate in governance and management of a Protected Area, which would

comprise parts or even the total of their community territories. The local communities are not only the owners of their land. As well they are ...

- ... concerned about their areas, being related to them traditionally and culturally (e.g. land of people's ancestors), and because they support their livelihoods (e.g. use of wild growing biodiversity resources, like for example rosehips).
- ... important players in decision making and implementation of decisions on the management of their lands and their ecosystems, besides the provincial authorities which are representing the State authority. Management decisions and efforts of local communities and populations may contribute towards the conservation of habitats, species, ecological functions and associated cultural values, although the original intention might have been related to a variety of objectives, not necessarily directly related to the protection of biodiversity (e.g. decrease of grazing impacts by the change in the agricultural system after the collapse of Soviet Union).
- ... usually not much interested in greater State governmental interference, decreasing their autonomy. Local communities may worry that official recognition of their territories as a Protected Area may get them co-opted into a larger system over which they have no control.

The obviously positive recent attitude of representatives of the local communities of Gnishik region towards providing their areas for a Protected Area under the precondition of community participation is for sure a result of preparatory communication work already done in the region by WWF Armenia and contributed by the stakeholder-excursion to Austria organised by the UNDP project management end of September 2010. Underlying reasons for support of a Protected Area by communities may be the following:

- As it is already materializing in self governing communities not far from Gnishik region, there is a threatening potential of forces of change in terms of mining exploitation interests and there is already strong illegal hunting pressure on wildlife in Gnishik region, against local people's interests. Local communities might consider being better able to withstand such threats with the help of an official recognition and appreciation. Recognition within the national system of Protected Areas may help providing local communities with additional safeguards over their land.
- First of all representatives of local populations are expecting strong external support for improvements of livelihoods and socio-economic conditions by the implementation of a Protected Area. They might expect higher attractiveness for donors and increased State funding directed to their communities. As often in similar situations, development of tourism is expected to be promising along with such a development. However, as much as tourism might indeed bear positive potentials, it should not be overrated. In general local communities are as a tendency more interested in the aspect of socio-economic development along with Protected Area implementation than in setting own effort and carrying restrictions for nature protection needs.

On the need of sufficient resources and their potential sources:

It should be noted from the conservation point of view, that the implementation of a Protected Area could bring new dangers, such as increased visitation and commercial attention to a site.

This risk has to be met by a capable, sufficiently resourced operational Protected Area Management unit, which is exercising authority and responsibility and is capable of enforcing regulations. As this takes reasonable financial resources, which in particular for a large Protected Area as considered Gnishik can not at all be provided by the concerned local communities, the question of funding sources has to be taken very seriously.

For good reason and based on bad examples there has to be concern in the conservation community, that community managed or co-managed Protected Areas could be weak

contributions to the national system of Protected Areas as a cheaper and more politically-expedient alternative to other conservation options.

It should be seen clearly, that managing high ranking, large area comprising Protected Areas of national or even international importance is and will keep on being a public responsibility. It takes resources that most usually can not be covered only by concerned local communities. Despite the communities of Gnishik region would hardly be able to contribute with financial means to the necessary operational management unit of the envisaged Protected Area, the project team agreed, that some kind of contributions, could be labour capacity, existing buildings or anything material or immaterial, should be claimed. This would prevent, that communities do not really identify and feel responsible for their Protected Area. Minimum contributions, financial, material or immaterial, could be set up as a prerequisite for State funding contributions.

The national experts considered that, resulting out of the RA administrative system, hardly any substantial financial contributions could be expected by the provincial administration. However, the strong support for a Protected Area by the Governor and his administration staff would be of high importance for success.

The project team agreed that no way, it would take State contributions for building up and running the necessary management institution for a Gnishik Protected Area, even in a case, that the State does not directly run such a unit. National experts considered the option that according to the RA Law on Self Governance the State could delegate his management obligations and take care for their financing.

Although kind of fashion, the possibility of sufficiently carrying self-financing of nature protection and Protected Areas in particular (often tried to be promoted on the basis of so called eco-tourism) is a fairytale, which does for sure not work in the large majority of cases. However, a Protected Area management entity may generate some additional income by compensational payments for provided services. Most likely such are related to visitors such as guided tours and other educational activities, entrance to visitor centres or special sites, camping or picnic facilities, selling of books, pictures or other items or fees for disobedience of regulations. Most likely such incomes will be far to less for covering all the costs of a capable management unit. Discussion was about a possible road toll for foreign visitors (not for locals) to Noravank canyon. The expert's opinion was rather against such methods on the example of United States National Parks (entrance fees).

Although may be with limited chance, it is encouraged to consider options for making selected private land owners giving financial contributions (e.g. church, argued by charity to local populations; private hunting business, argued by the kind of activities and/ or benefits for them by active Protected Area management). However, this might only have a chance, if such were as well given participation rights to a certain extent.

Project funding by international donors and in future potentially as well by domestic sponsors of course has to be seen as an important source for financing a Protected Area in Gnishik region. WWF already succeeded in getting substantial funding, e.g. by the Norwegian government, for preparatory initiatives, including e.g. the construction of a visitor facility. This is of course extremely positive and favourable in particular during the preparatory phase of such a project. However, often donor project funding is linked with strict and inflexible implementation schedules, not always easy to adjust to recent needs and process status. In any case, the implementation of a Gnishik Protected area would take a sound financial contribution by donor funds, to build up the necessary structures, organisation, and mechanisms, to implement necessary infrastructure and equipment and – of highest importance – to allow a strong initiative on tangible improvements for people's livelihoods and in the socio-economic sphere. Only a number of such pilot impulse and light-house projects would allow bringing local people on board the boat for the following mid- and long-term development. The Caucasus Nature Fund would be a promising source for co-funding the necessary operational management unit.

4.3.3.2 Preliminarily considered options

Based on discussions on the above mentioned aspects, the UNDP project manager, the commissioned national experts of CEP SNCO and WWF Armenia and the international consultant talked about possible options for governance and management organisation and mechanisms for a Gnishik Protected area.

The Heads of the four crucially concerned communities and the Governor of Vayots Dzor Marz made clear in meetings with the project team during its two days visit to Gnishik region October 26th - 27th, that participation of the communities in management and governance would be a prerequisite for their acceptance of a Protected Area and the communities' willingness to contribute with their territories. Because of this it seems very unlikely that a governance and management solution similar to other large scale Protected Areas in Armenia (State governance and management, implemented by a SNCO) could only be considered for Gnishik. The more, as the land tenure situation in this region would not at all support such a solution.

Option preliminary considered by WWF:

The representative of WWF Armenia in the project team presented a preliminary consideration, which was later pictured by the international consultant in the following scheme.

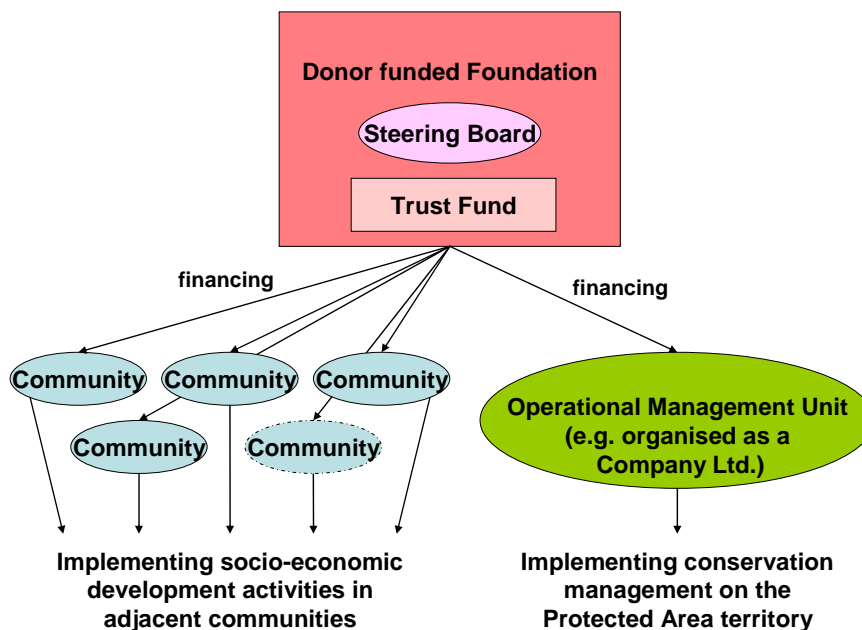


Figure 4: Preliminary consideration for organisation of governance and management by WWF.

According to this approach, donors would implement a foundation. A kind of steering board of this foundation would be in charge of managing a trust fund, which would be financed by donor contributions. Out of this trust fund the foundation would finance an operational management unit, which might be organised as a company Ltd. This management unit would be in charge of implementing conservation management on the territory of the Protected Area. On the other side the foundation would use its trust fund for financing socio-economic activities in the communities adjacent to the Protected Area.

Option (and derivatives) based on further discussions within the project team and preliminary considerations by the international consultant:

Any solution would need to have a strategic steering, governing component and an operational management component. Facing the situation in Gnishik and respecting the

communities' strong call for their intensive participation, an association, established for the purpose of taking the governance component of the envisaged Protected Area, could be considered.

First of all, all the communities taking part on the Protected Area by contributing territory should be member of this association. In addition the provincial administration of Vayots Dzor could become a member. As mentioned above, these administrative entities would have rather little or hardly any resources and capacities for funding and operating the Protected Area. Therefore, the Republic of Armenia, represented by the Ministry in charge of Protected Areas, the MoNP, should become a member. Taking the State's responsibility for high ranking Protected Areas, via the MoNP basic State funding for the Protected Area could be provided. Envisaged as complementary components for financing the Protected Area would be the Caucasus Nature Fund and other donor organisations. Possibly the communities and the provincial administration could at least give little symbolic financial or may be more substantial immaterial or material contributions to the association. Originating in the WWF's preliminary consideration, the financial basis for the association could be organised and institutionalised as a trust fund. The governance of the association could be organised with a steering board. In this steering board all the member communities would be represented by their mayors. Out of these the chairman of the board could be elected for a certain term. The other members of the association would of course as well have seat and vote in the steering board. The State could be represented by officials of line organisations of the MoNP, suggested the Biodiversity Management Agency and the local branch of the State Environmental Inspection. A representative each of these two State line organisations would line out the importance of sound conservation implementation in the Protected Area. Their weight in order to balance possible overwhelming user-interests, would be strengthened by their role as representatives of the major contributing entity to basic financing. Possibly as well donor organisations, in particular such which may provide long-term co-funding perspectives like the Caucasus Nature Fund might become members of the association and thus be represented in the steering board.

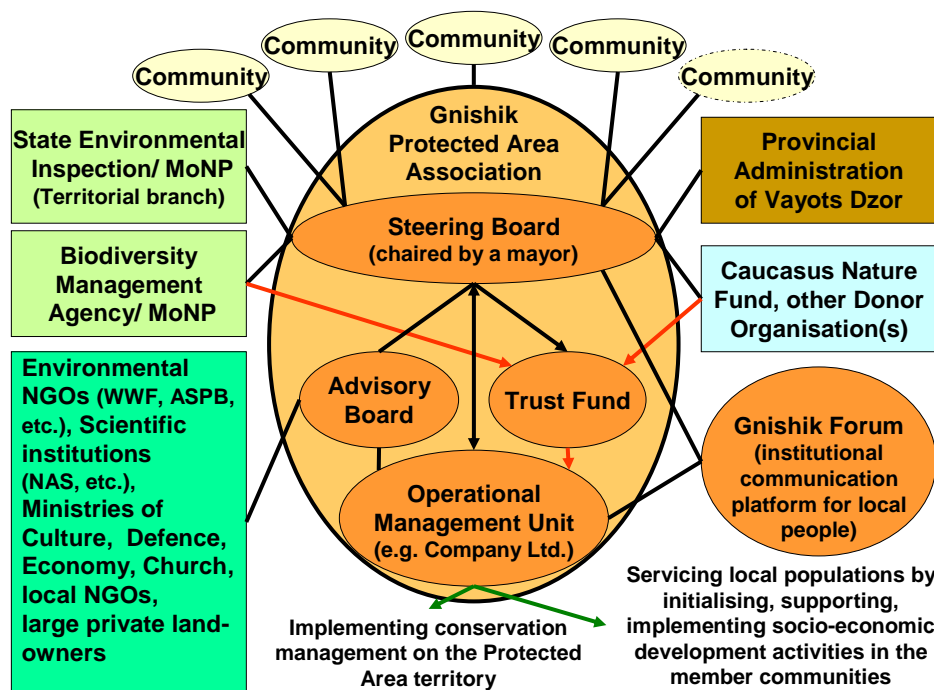


Figure 5: Preliminary consideration for organisation of governance and management, based on further discussions within the project team and preliminary considerations by the international consultant.

The steering board would represent the association and hold decision-making and management authority and responsibility about the Protected Area. It would guide and

supervise the operational management unit of the association and manage its trust fund, in case such is implemented.

The operational management unit would be the executive management of the association or could be organised as a company ltd. It would have two central operational tasks: a) implementing conservation management on the Protected Area territory, and b) servicing local populations by initialising, supporting, implementing socio-economic development activities in the member communities. By combining these two major tasks under mandate of one entity, it should be assured, that their implementation does not happen separately or even worse conflicting each other. Nature conservation should be done with wise respect to local people's needs, and socio-economic development should be fostered in a sustainable way with respect to nature conservation requirements.

In order to allow institutionalised communication and cooperation with relevant stakeholders, two more structures could be considered:

An advisory board would allow structured and continuing participation of organisations representing stakeholder interests as well as support to the management unit and the steering board with expertise, networking, lobbying and public relations issues. Typical members could be representatives of environmental NGOs, scientific, educational and cultural institutions, of larger private land-owner as for example the church and (considering the border situation of Gnishik and the cultural heritage in Noravank canyon) other ministries. The advisory board could be split in a scientific advisory board and a stakeholder board.

For institutionalised communication with local populations and stakeholders a forum could be established.

Of course all these organisational constructions as well as their mechanisms would have to be clearly worked out and stated in a charter of the association.

As for the moment this can only be a consideration and an approach it has to be noted, that the pictured option could be changed and fine tuned in several thinkable ways. It in any case would have to be designed with participation of the concerned entities in a suitable discussion process.

For the further discussions and work on the design of governance and management structures and mechanisms special attention should be given to how well the considered governance regime might function in the specific situation of Gnishik region, because this would in the end have influence on management effectiveness. The following broad principles for good governance of Protected Areas should be taken into account:

- Social dialogue and collective agreements on Protected Area management objectives and strategies on the basis of freedom of association and speech with no discrimination related to gender, ethnicity, lifestyles, cultural values or other characteristics;
- Subsidiarity – attributing management authority and responsibility to the institutions closest to the resources at stake;
- Fairness – sharing equitably the costs and benefits of establishing and managing the Protected Area;
- Making sure that the costs of establishing and managing the Protected Area are not loaded on entities which would not be able to carry them;
- Direction – fostering and maintaining an inspiring and consistent long-term vision for the Protected Area and its conservation objectives;
- Effectively conserving biodiversity whilst responding to the concerns of stakeholders and making a wise use of resources;
- Accountability – having clearly demarcated lines of responsibility and ensuring adequate reporting and answerability from all stakeholders about the fulfilment of their responsibilities;
- Transparency – ensuring that all relevant information is available to all stakeholders;
- Human rights – respecting human rights in the context of Protected Area governance, including the rights of future generations, local communities and private owners.

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6 Annexes

A) Overview on Sanctuaries in the Republic of Armenia

Sanctuaries in RA legislation

The RA system of Protected Areas is determined by the Law of the Republic of Armenia On Specially Protected Nature Areas, adopted on November 27th, 2006.

In Article 1 of this Law a specially protected nature area is defined as an “area or individual object encompassing the terrestrial surface (including underground water, soil and mineral resources) and the airspace above which is described by this law, holding conservation, scientific, educational, health, historical, cultural, recreational, tourism and aesthetic values and having the special conservation regime.”

According to Article 4 the RA SPNAs are classified as:

- a) according to importance: international, republican and local specially protected nature areas;
- b) according to categories: State Reserve, National Park, State Sanctuary and Nature Monument.

A **definition** for the SPNA category **State Sanctuary** (and the same for the other three categories and classifications by importance) is given in Article 1:

“An area of scientific, educational, historical, cultural and economic values which ensures conservation of ecosystems and their components and nature recovery.”

Article 18 defines on the conservation regime in a State Sanctuary:

- “1. Any activity disturbing the ecosystem sustainability or threatening ecosystems, flora and fauna, scientifically or historically valuable objects which demand for special protection measures is prohibited in the State Sanctuaries of the Republic of Armenia.
2. All goals and characteristics of conservation regime are regulated by the charter of a given State Sanctuary.”

This Article 18 (1) reads rather strict and should guarantee a strong protection status for RA State Sanctuaries. According to Gevorgyan A. and Aghasyan A.¹² the main aims for designation of State Sanctuaries are the protection of ecosystems and certain species which are rare, threatened or of high scientific-cognitive significance as well as the restoration of resources in ecosystems under active economic use.

The conservation regime as specified by Article 18 for State Sanctuaries is according to Article 17 applied to Sanctuary zones of National Parks, which are defined in Article 1 as “an area isolated from the National Park where the regime of State Sanctuary is applied.

Different to other categories and classifications of Protected Areas the Law On Specially Protected Nature Areas states only the above mentioned but no more explicit regulations on the category State Sanctuary.

The Law of the Republic of Armenia On Specially Protected Nature Areas does not at all explicitly refer to or mention the international definition of a Protected Area and the Protected Area management categories I – VI given by IUCN.

By the RA Land Code Article 20 “nature protection lands are those having natural, scientific, decorative and recreation significance and lands of natural monuments, reserves, national

¹² Gevorgyan A. and Aghasyan A., 2008: Current State of the Specially Protected Nature Areas of the Republic of Armenia. Transboundary Joint Secretariat (TJS) for South Caucasus, Armenian National Office, Yerevan

parks and arboretums and parks, botanical gardens and sanctuaries (except for hunting) designated for special protection. In nature protection lands it is prohibited to carry out activities having no connection with protection and research of natural complexes and objects and any other activity not envisaged by the law. The alienation of nature protection lands is prohibited if it contradicts their purpose and functional significance.”¹³

Development and current status of RA State Sanctuaries

As in all the South Caucasus region the RA system of SPNAs roots in the previous system of Zpovedniks and Zakazniks of the former Soviet Union. Speaking for the Caucasus ecoregion, traditionally, many wildlife sanctuaries were created as hunting refuges, but today new forms of refuges are being established, such as landscape, botanical, and zoological sanctuaries. Sanctuaries are often created to protect a certain threatened habitat or species. Protection regimes generally forbid logging, drainage of wetlands, use of chemicals, and any other intensive forms of nature use, but often permit hunting, fishing, and collection of non-timber forest resources such as mushrooms, berries, and medicinal plants.¹⁴

First of today's State Sanctuaries existing in Armenia were established as Zakazniks in 1958 in the Forest Districts of Gyuney, Gyulagarak, Jermuk and Herher as well as on certain territories with stands of yew (*Taxus baccata*), hazel-nut (*Corylus colurna*), plane (*Platanus orientalis*), walnut (*Juglans regia*), wild-pear (*Pyrus sp.*), wild-apple (*Malus sp.*) juniper (*Juniperus sp.*) and cornel (*Cornus mas*). In 1959 some more State Sanctuaries were designated: Pine of Banch, Goravan Sands, alpine meadows and Lake Kare on Southern Aragats, Rose-bay areas in Hankavan and littoral areas of Lake Sevan. Later on the system of SPNAs was expanded by new State Reserves and State Sanctuaries (mainly established in 1950-80's).¹⁵

According to the previous version of the RA Law On Specially Protected Areas (1991) the SPNAs now named State Sanctuaries were called State Conservation Areas. In the report “Assessment of priority capacity building needs for biodiversity” (2002) they were described as “specially protected areas where economical uses are not totally excluded, or are excluded temporarily. The regimes are specially designed to enable natural systems or their elements to be conserved and replicated. The goals of state conservation areas are both conservation of rare, threatened, and valuable ecosystems and species, and the rehabilitation of actively used ecosystems.”¹⁶ In this report it was mentioned that “borders of State Conservation Areas are not fully clear and likewise, the allowed activities are not clear. There is a lack of clear legislation and management systems.” The authors of this 2002 report further tell that “since 1995, following a Government decision, Conservation Areas are all under the supervision of Ministry of Nature Protection, except of 7 which are still supervised by the Ministry of Agriculture.” This information might be doubt from today's point of view. About the quality of the management of these former called State Conservation Areas, now called State Sanctuaries, the study authors wrote that they “only exist on paper - with the exceptions of Vordan Karmir and Sev lich. There are no monitoring or special scientific investigations in Conservation Areas or their ecosystems. There are no projects

¹³ Gevorgyan A., Aghasyan A., Ghulijanyan A. and Hambardzumyan A., 2008: Analysis of the Current State of the RA Specially Protected Nature Areas Management Planning. Principles of Planning Protected Areas Management and Corresponding Legal Framework. Transboundary Joint Secretariat (TJS) for South Caucasus, Armenian National Office, Yerevan

¹⁴ Williams L. (editor), Zazanashvili N., Sanadiradze G. and Kandaurov A., 2006: An Ecoregional Conservation Plan for the Caucasus. Second Edition. Coordinated by WWF Caucasus Programme Office, Tbilisi

¹⁵ Gevorgyan A. and Aghasyan A., 2008: Current State of the Specially Protected Nature Areas of the Republic of Armenia.

¹⁶ Shashikyan S. et al., 2002: Assessment of priority capacity building needs for biodiversity. Report to GEF project implemented by UNDP, Yerevan

targeting conservation and sustainable use. Management regimes to ensure conservation and use of these Protected Areas have not been established. In fact, the ecosystems inside these areas are managed the same as other ecosystems across the country”.

The authors of the report “Biodiversity Analysis Update for Armenia” (2008) considered: “The strategic goal of Armenia’s Specially Protected Nature Areas’ (SPNA) policy is biodiversity conservation. The policy provides for the protection and conservation of national, natural, and cultural heritage, including important habitats and species, as well as landscapes, cultural and natural monuments, and important geological formations. In particular, several PAs were created to preserve the habitats of unique, rare, and endemic species listed in the Armenian Red Data Books (plants and animals).”

And further in the same report: “An important step forward in Armenia’s PA development was the production of the “Strategy on Developing Specially Protected Areas and National Action Plan 2003-2010,” which was approved in 2002 by Government Decree No. 54. During implementation of the National Action Plan substantial progress was made in the improvement of environmental legislation, PA management effectiveness, and capacity building. However, the situation is far from ideal, primarily due to weak socioeconomic conditions and the unstable political situation in the region”.¹⁷

In fact, in recent years some progress could be achieved in developing the RA system of SPNAs in terms of quantity and quality and a number of activities, programmes and projects to come even further are in progress. Gevorgyan A. and Aghasyan A. (2008) present information on achievements such as clarification of status, borders and objectives, designation of buffer zones, improvements in the management structure and organisation and others in the State Sanctuaries of Goravan Sands, Plane Grove, Ararat Vordan Karmir, Khor Virap, Gilan and Vorotan in the past decade.

Following the “State Strategy on Developing Specially Protected Nature Areas and National Action Plan for 2003-2010” there were plans to expand the RA system of SPNAs significantly, in order to better represent all the ecosystems in Armenia in the system and to meet other goals. The establishment of new National Parks, State Reserves, State Sanctuaries and the implementation of totally new categories such as Nature Parks and Biosphere Reserves was considered and planned.¹⁸

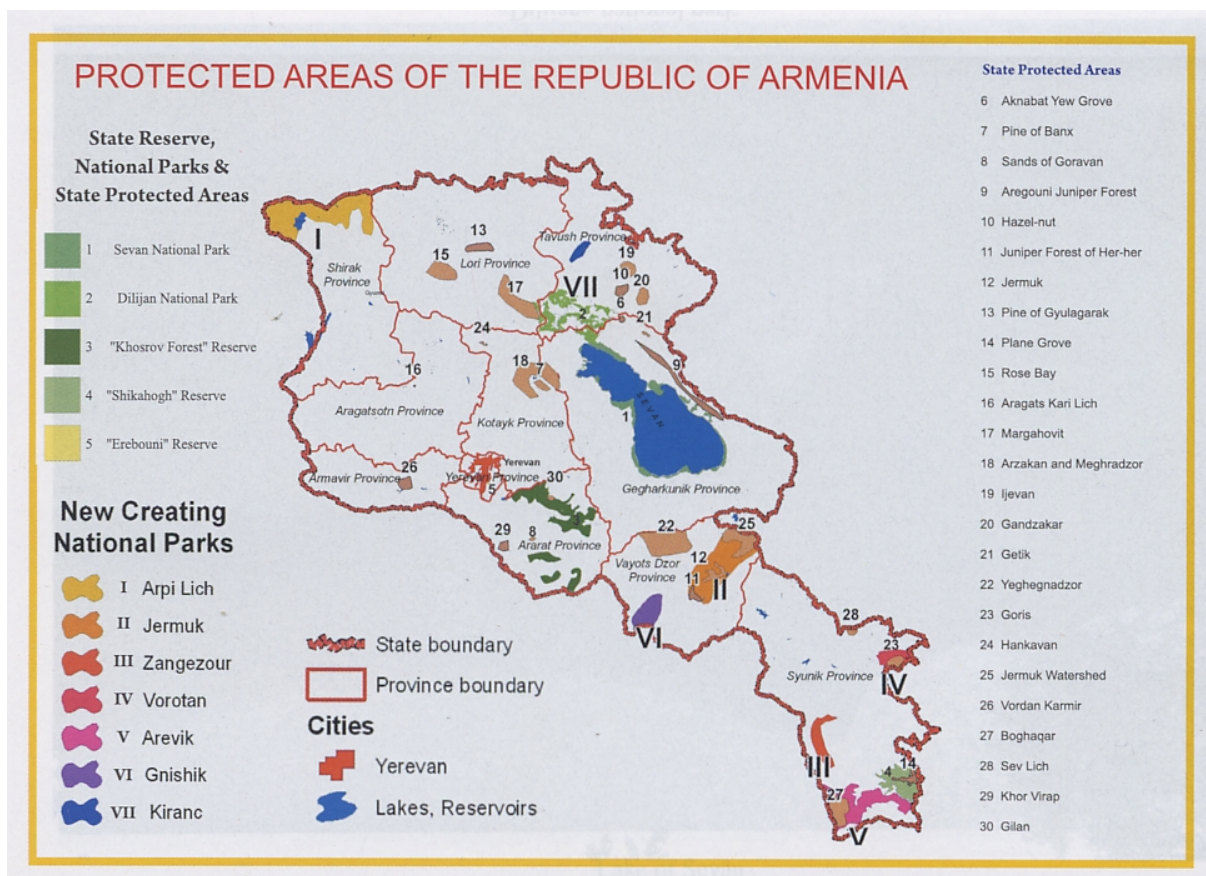
According to Gevorgyan A. and Aghasyan A.¹⁹ in early 2009 the RA system of SPNAs comprised 25 State Sanctuaries.

Since early 2009 to present, e.g. two more National Parks (Lake Arpi and Arevik) and Zangezur State Sanctuary were legally established. Some other envisaged new SPNAs like Khustup, Gnishik and Kirants Sanctuaries are still in the process of consideration or planning. The latter two give example, that obviously even the category status of these future Protected Areas is still in discussion, as they can be found in literature and maps addressed as Sanctuaries, National Parks or Nature Parks (e.g. in Gevorgyan A. and Aghasyan A. (2008), WWF Armenia’s map of the system of specially protected nature areas, oral information).

¹⁷ ECODIT Inc. Team, 2008: Biodiversity Analysis Update for Armenia (“Armenia Biodiversity Update”). Prepared for USAID/Armenia, Arlington, USA

¹⁸ Gevorgyan A. and Aghasyan A., 2008: Current State of the Specially Protected Nature Areas of the Republic of Armenia.

¹⁹ Gevorgyan A. and Aghasyan A., 2009: Recommendatory Guidelines on Development of Management Plans for the RA Specially Protected Nature Areas. Transboundary Joint Secretariat (TJS) for South Caucasus, Armenian National Office, Yerevan



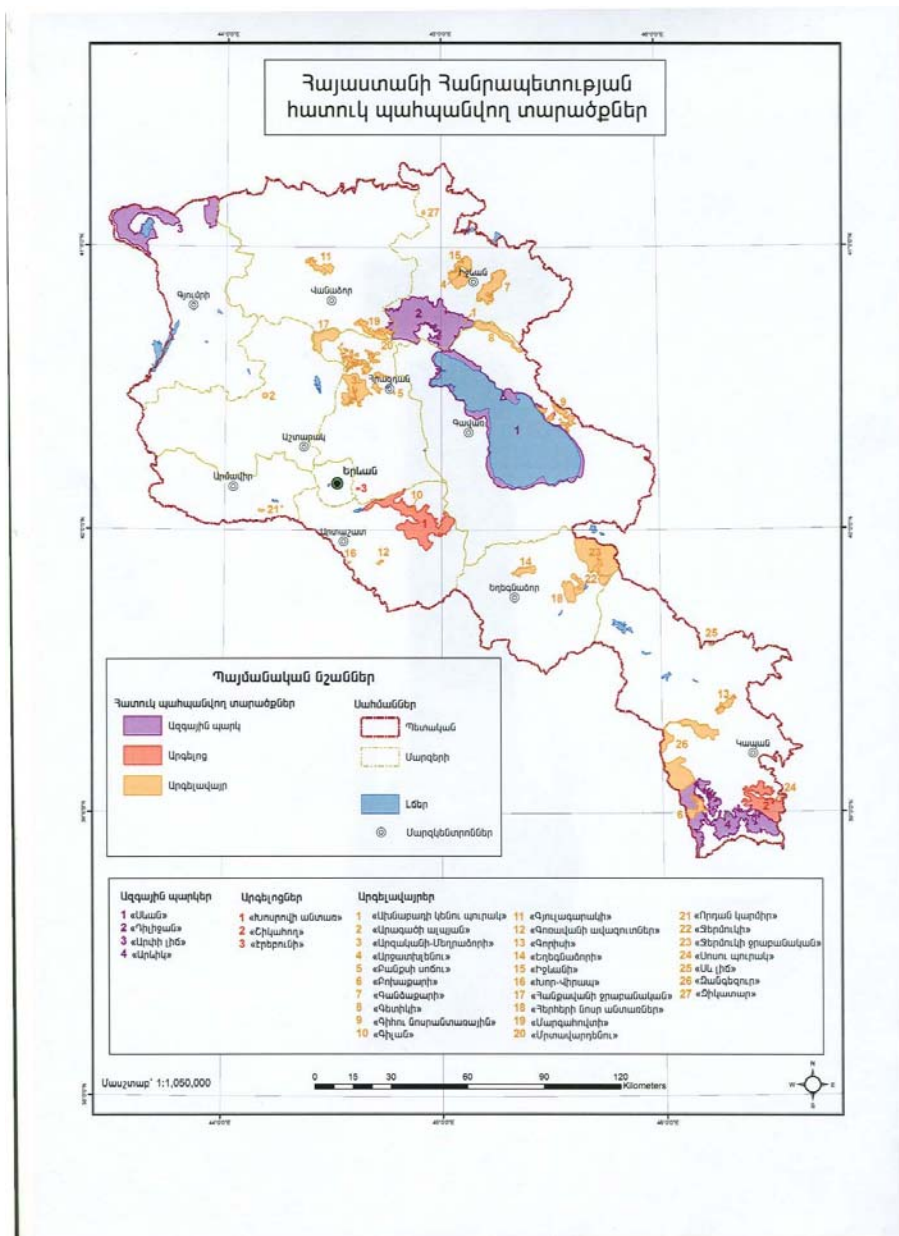
Map 1: Protected Areas of the Republic of Armenia (2008)²⁰

An updated situation of the system of RA SPNAs in 2010 is shown in map 2. According to this map currently 3 State Reserves, 4 National Parks and 27 State Sanctuaries exist in Armenia. These are listed in table 1.

National Parks			
1 "Sevan"	2 "Dilidjan"	3 "Lake Arpi"	4 "Arevik"
State Reserves			
1 "Khosrov Forest"	2 "Shihaghoh"	3 "Erebuni"	
State Sanctuaries			
1 "Akhnabad's yew grove"	8 "Getik"	15 "Idjevan"	22 "Djermuk"
2 "Aragat's alpine"	9 "Juniper open forests"	16 "Khor-Virap"	23 "Djermuk hydrological"
3 "Arzakan-Meghradzor"	10 "Gilan"	17 "Hankavan's hydrological"	24 "Plane grove"
4 "Corylus colurna"	11 "Gjulagarak"	18 "Herher's open forests"	25 "Sev lich"
5 "Pinus banksiana"	12 "Goravan's sands"	19 "Margahovit"	26 "Zangezour"
6 "Bokhakar"	13 "Goris"	20 "Rhododendron caucasicum"	27 "Zikatar"
7 "Gandzakar"	14 "Eghegnadzor"	21 "Vordan karmir" (Kochenille)	

Table 1: State Reserves, National Parks and State Sanctuaries in Armenia (2010), according to map 2

²⁰ Gevorgyan A. and Aghasyan A., 2008: Current State of the Specially Protected Nature Areas of the Republic of Armenia.



Map 2: Specially protected nature areas of the Republic of Armenia (2010), source unknown to author

Organisation and management of RA State Sanctuaries

General aspects of the organisation of the RA SPNAs

According to the RA Law On Specially Protected Nature Areas, which regulates as well establishment, authority and management competencies, protection and use of Armenia's Protected Areas, the Government of the Republic of Armenia is the authority for designation, establishment, management, protection and use of SPNAs, including approval and revision of management plans for SPNAs of international and republican significance. Territorial, regional bodies of State governance and - more limited - bodies of local administration participate in the development of state programmes and management plans connected with SPNAs. In detail the competencies and responsibilities of the RA Government, Territorial bodies of State governance and bodies of local administration are regulated in Articles 8, 10 and 11 of the Law On Specially Protected Nature Areas.

The State governance body in the field of SPNAs authorised by the RA Government and the authority for management of SPNAs of international and republican significance is the RA

Ministry of Nature Protection.²¹ Its competencies and responsibilities are regulated in detail in Article 9 of the Law On Specially Protected Nature Areas. Within the MoNP the Division of Biodiversity and Water Conservation plays a substantial role in choosing the PA regime (National Park, State Reserve, etc.) and for the development of appropriate requirements for the PA based on the regime.²²

The Bioresources Management Agency, which was established in the structure of the RA MoNP by the RA Governmental decision N 1236N from 8 August 2002, implements the authorities of the MoNP, carries out scientific research, protection, reproduction and sustainable use of natural ecosystems, including forests, fauna and flora biological diversity, and natural heritage. It supports the development and implementation of the State policy in these fields and coordinates protection and sustainable use of SPNAs. The Agency through the Departments of SPPAs and arboretums carries out the function of support to the management of in-situ and ex-situ protection objects.

Since 1995 the State Reserves and National Parks of RA have been included in the structure of the RA MoNP. The operational management of State Reserves and National Parks was organised under the mandate of State Non-Commercial Organisations subordinated to the MoNP's Bioresources Management Agency. In particular these are Khosrov Forest and Shikahogh State Reserves SNCOs, Sevan, Dilijan, Lake Arpi and Arevik National Parks SNCOs and Reserve-Park Complex SNCO (responsible for ex-situ conservation in arboretums and Erebuni State Reserve). These structures are non-profit organisations in the status of a legal person, established according to the RA Law on State Non-Commercial Organizations (2001) for carrying out activities in environmental and other non-commercial fields. They are funded by RA State budget allocations, fees based on activities implemented and services provided by the SNCOs, and by sponsorship, donations and entrepreneurial activities of the organisations in line with the objectives of the SPNAs. State-owned asset is handed over to these SNCOs by property right as well as buildings, constructions and respective land areas – for free of charge use without time limits.

The status of SPNAs is defined according to the requirements of the RA Law on Specially Protected Nature Areas. The peculiarities of the objectives and regime are stated by Charters for individual SPNAs, which are to be approved by RA Governmental decisions. The fulfillment of the requirements given by the SPNAs Charters is, as mentioned above, ensured by SNCOs, which have core tasks in the fields of nature protection, scientific-research and scientific-cognitive (ecoeducational) activities for the State and the public. They function in compliance with the RA Constitution, Civil Code, Laws on State Non-Commercial Organizations and on Specially Protected Nature Areas, other laws, their Charters and other legal acts.

Organisation and institutional status of RA State Sanctuaries

Different to State Reserves and National Parks State Sanctuaries were not given the status of a legal person. Out of the 25 State Sanctuaries existing in early 2009, only 8 were in the structure of the RA MoNP, although according to the Law On SPNAs all PAs of international and national importance should be exclusively managed by the MoNP as the responsible authority.²³ Out of these 8 Sanctuaries 6 (Sev Lich, Vordan Karmir, Plane Grove, Gorovan Sands, Khor Virap, and Gilan) had charters according to Article 18 (2) of the Law On Specially Protected Nature Areas, approved by the RA Government. The operational management of the 8 State Sanctuaries under the MoNP was mandate of the above

²¹ Gevorgyan A. and Aghasyan A., 2008: Current State of the Specially Protected Nature Areas of the Republic of Armenia.

²² ECODIT Inc. Team, 2008: Biodiversity Analysis Update for Armenia

²³ ECODIT Inc. Team, 2008: Biodiversity Analysis Update for Armenia

mentioned SNCOs as shown in table 2.²⁴ Management plans for these Sanctuaries do not yet exist.

Name of State Sanctuary	SPNA SNCO	Area	Established by
Khor Virap	Khosrov Forest State Reserve SNCO	50.28 ha	RA Government decision N 975-N, 25.01.2007
Goravan Sands	Khosrov Forest State Reserve SNCO	95.99 ha	ArmSSR CM decision N 20, 29.01.1959 Charter and size approved by RA Government decision N 975-N, 25.01.2007
Gilan	Khosrov Forest State Reserve SNCO	118 ha	RA Government decision N 673-N, 24.05.2007 Charter approved by RA Government decision N 930-N, 09.08.2007
Sev Lich	Reserve-Park Complex SNCO	240 ha	RA Government decision N 1401-N, 12.10.2001 on basis of the Reserve established by ArmSSR CM decision N 717, 17.10.1987
Ararat Vordan Karmir	Reserve-Park Complex SNCO	219.85 ha	ArmSSR CM decision N 61, 03.02.1987
Plane Grove	Shikahogh State Reserve SNCO	64.2 ha	ArmSSR CM decision N 341, 13.09.1958 Charter approved by RA Government decision N 1044-N, 15.07.2004 Size approved by RA Government decision N 1401-N, 07.09.2006
Sevan Juniper open woodlands	Sevan National Park SNCO	3,312 ha	ArmSSR CM decision N 341, 13.09.1958
Akhnabad Yew Grove	Dilijan National Park SNCO	25 ha	ArmSSR CM decision N 20, 29.01.1959
Total		4,125.32 ha	

Table 2: RA State Sanctuaries under mandate of SPNA SNCOs of the MoNP (2008)²⁵

14 State Sanctuaries were in the structure of the Armenian State Forests (“Hayantar”) SNCO subordinated to the RA Ministry of Agriculture and included in and operationally managed by Hayantar’s branch Forest Enterprises as forests under the Government forest management plan (an overall plan for managing Armenia’s forests). This plan differs considerably from Government’s Protected Area management plan. None of these State Sanctuaries have their approved charters and management plans according to the RA Law On SPNAs and even

²⁴ Gevorgyan A. and Aghasyan A., 2009: Recommendatory Guidelines on Development of Management Plans for the RA Specially Protected Nature Areas.

²⁵ Gevorgyan A. and Aghasyan A., 2008: Current State of the Specially Protected Nature Areas of the Republic of Armenia.

boundaries are not clearly delineated. Therefore, it is much more difficult to legally protect them than it is to protect State Sanctuaries that have approved charters.²⁶

Name of State Sanctuary	Hayantar Forest Enterprise	Area	Established by
Hazel-nut Sanctuary (Corylus Colurna)	Ijevan Forest Enterprise	40 ha	ArmSSR Coucil of Ministers decision N 341, 13.09.1958
Banx Pine Sanctuary	Hrazdan Forest Enterprise	4 ha	ArmSSR CM decision N 20, 29.01.1958
Her-Her Open Woodland	Yeghegis Forest Enterprise	6,139 ha	ArmSSR CM decision N 341, 13.09.1958
Jermuk, Arpa River basin	Jermuk Forest Enterprise	3,865 ha	ArmSSR CM decision N 341, 13.09.1958
Gyulagarak Pine	Stepanavan Forest Enterprise	2,576 ha	ArmSSR CM decision N 341, 13.09.1958
Caucasus Rhododendron Sanctuary (Pambak and Tsakhkunyats Mountain Ranges)	Gugark Forest Enterprise	1,000 ha	ArmSSR CM decision N 20, 29.02.1959
Margahovit Sanctuary (Pambak River basin)	Gugark Forest Enterprise	3,368 ha	ArmSSR CM decision N 75, 16.11.1959
Arzakan and Meghradzor Sanctuaries (Marmarik and Ghalarik Rivers basin)	Hrazdan Forest Enterprise	13,532 ha	ArmSSR CM decision N 375, 16.11.1971
Ijevan Sanctuary (Ijevan and Kayen Mountain Ranges)	Ijevan Forest Enterprise	5,908 ha	ArmSSR CM decision N 375, 16.11.1971
Gandzakar Sanctuary (Paytajur and Aghstev Rivers basin)	Ijevan Forest Enterprise	6,813 ha	ArmSSR CM decision N 375, 16.11.1971
Getik Sanctuary	Jambarak Forest Enterprise	5,728 ha	ArmSSR CM decision N 375, 16.11.1971
Yeghegis Sanctuary (Arpa River right tributary)	Yeghegis Forest Enterprise	4,200 ha	ArmSSR CM decision N 375, 16.11.1971
Boghakar Sanctuary	Meghri Forest Enterprise	2,728 ha	ArmSSR CM decision N 400, 10.08.1989
Goris Sanctuary	Goris Forest Enterprise	1,850 ha	ArmSSR CM decision N 775, 16.11.1972
Total		46,815 ha	

Table 3: RA State Sanctuaries subordinate to Hayantar SNCO/ Ministry of Agriculture (by Gevorgyan A. and Aghasyan A., 2009)

Aragats Alpine Sanctuary was in the structure of the Institute of Physics of the RA Ministry of Economics. Hankavan Hydrological and Jermuk Hydrological State Sanctuaries were located out of administrative borders of communities on State (reserve) lands and thus under mandate of Territorial Bodies of State Administration, subordinated to the RA Ministry of Territorial Administration.²⁷ Charters and management plans for these Sanctuaries do not yet exist.

²⁶ ECODIT Inc. Team, 2008: Biodiversity Analysis Update for Armenia

²⁷ Gevorgyan A. and Aghasyan A., 2009: Recommendatory Guidelines on Development of Management Plans for the RA Specially Protected Nature Areas.

Since 2009 up to present Bokhakar State Sanctuary was put under subordination of the new established Arevik National Park SNCO and the new implemented Zangezur State Sanctuary was given under mandate of Shikahogh State Reserve SNCO.

Approaches towards management effectiveness of RA State Sanctuaries

The Ecoregional Conservation Plan for the Caucasus points out the importance of an ecoregional system of different categories of Protected Areas, all in high developed management quality: "Saving the unique ecosystems and endangered species of the Caucasus Ecoregion requires creating new Protected Areas and linking reserves in a network of corridors and stepping stones, while improving management, financing, and government and public support of Protected Area activities. Strategic networks of Protected Areas require planning and multi-national cooperation at the ecoregional level. They integrate various land management tools and all types of Protected Areas into an integrated framework for biodiversity conservation and sustainable use of natural resources. Strategic networks of Protected Areas in the Caucasus could incorporate areas of highest conservation value (IUCN I-II) such as Strict Nature Reserves and National Parks as core areas or nodes, and use Sanctuaries and multiple-use areas (IUCN IV-VI) as stepping zones and corridors between the nodes. Despite of existing gaps the present systems of Strict Nature Reserves, National Parks, Sanctuaries, and other types of Protected Areas provide a significant basis for conservation of biodiversity in the Caucasus Ecoregion.

However, management practices of existing Protected Areas and adjacent lands do not always guarantee effective conservation of biodiversity. In many cases, Protected Areas were created without considering the interests of local communities and administrations. As a result, conflicts abound and public support for Protected Areas is generally lacking. Local people are often poorly informed about Protected Areas and, as a result of the economic crisis in the Caucasus, poaching, illegal forest cutting, and grazing in Protected Areas are on the rise. Buffer zones are in virtually non-existent, so consequences of resource use and human pressures outside reserves spill over the borders and impact protected ecosystems. Finally, government support for the Protected Areas system is often insufficient. State funding for Protected Areas operations and development is hardly enough to ensure that protected regimes are upheld. International cooperation on Protected Areas between governments is also lacking. Speaking of Sanctuaries in Caucasus Ecoregion, these are usually poorly protected and mostly lacking an administrative body with rangers and scientific staff."²⁸

In Armenia numerous programmes, activities and projects run by the RA MoNP and its line organisations, by NGOs and with strong support of various international donors in the past decade give prove of the strong efforts to improve the RA system of SPNAs in compliance with the above mentioned recommendations and requirements of the Ecoregional Conservation Plan and international standards. Among these a number of system gap analysis and evaluation studies on management effectiveness and capacity needs of RA SPNAs were done and project activities are ongoing in order to fight the risk, that Protected Areas end up as "paper parks" without sufficient operations capacities and resources.

Hayman (2008)²⁹ pointed out that "Protected Areas management is an ongoing process of planning, management and evaluation that requires inputs from the site and the system levels. Often management effectiveness is hampered by no real management, with the PA existing only as a "paper park"; inadequacies of human resources to carry out PA management activities; inadequacies and shortfall in funding. PA management is also impacted by the existence of threats and vulnerabilities that affect management in one way or another. All these issues together result in often ineffective management and gaps in

²⁸ Williams L. (editor), Zazanashvili N., Sanadiradze G. and Kandaurov A., 2006: An Ecoregional Conservation Plan for the Caucasus. Second Edition.

²⁹ Hayman A., 2008: Protected Areas capacity development action plan for the Republic of Armenia

efficiencies. Adding to this there is often a wide gap in financing and this further stymies management efforts.”

In the same Capacity Development Action Plan document the following critical management challenges at the site level were addressed as:

- weak management planning;
- poor collaboration with and participation of communities;
- weak financing;
- poor boundary demarcation;
- inadequate training and employment conditions for staff;
- poor infrastructure;
- gaps in monitoring and research and;
- weak restoration and rehabilitation of ecosystems.

At the system level, key institutional challenges identified included:

- ecosystems management inventory and data management;
- training;
- setting targets;
- financing and civic dialogue.

A prioritization of the threats, management challenges and institutional challenges produced a list of 9 priority challenges and issues. These are³⁰:

- Sustainable financing
- Public awareness and education
- Human resources development
- Research, data, monitoring and inventory
- Community participation
- Ecosystems management (including restoration and rehabilitation)
- Infrastructural development
- Surrounding land use
- Management planning

All these identified general challenges may be assumed as well applicable to the RA State Sanctuaries, many even more than to other categories of RA SPNAs.

As part of the preparatory phase of the GEF/ UNDP project “Supporting Country Action on the CBD Programme of Work on Protected Areas - system gap analysis, creation of new management models and training of staff of Protected Areas of the Republic of Armenia” a management evaluation of RA SPNAs including “Sevan”, “Dilijan” and “Lake Arpi” National Parks, “Khosrov”, “Shikahogh” and “Erebuni” State Reserves and 25 State Sanctuaries has been carried out in 2009 in very short time, based on meetings with supervising authorities of RA SPNAs. Thus the evaluation may be subjective and dependent to the evaluator to some extent.³¹ The authors of the report conclude related to their evaluation on the RA State Sanctuaries:

“While comparing indices of Sanctuaries under different subordination it becomes obvious that the lowest indices are registered in Sanctuaries under subordination of «Armforest» (Ministry of Agriculture of the RA) and Aragats alpine (Institute of Physics). Here no management activities were performed, there is no staff and budget. The highest indices are registered in Sanctuaries under subordination of State Reserves and National Parks (Plane Grove, Akhnabat Yew Grove, Goravan Sands, Khor Virap, Gilan, Juniper open woodland of Sevan). The management state of State Sanctuaries under the subordination of Reserve-park Complex is rather good (Sev lich sanctuary). In many cases these Sanctuaries have

³⁰ Hayman A., 2008: Protected Areas capacity development action plan for the Republic of Armenia

³¹ Vardanyan Z. et. al., 2009: Report on RA Specialy Protected Nature Areas management evaluation. Yerevan

staff and, though no budget is allocated as self financing resources, there is financial circulation due to special article through by which the budget of the main organization is shared.”

The authors of the report came to the following conclusions:

“The situation can be considered satisfactory in general. All SPNAs have legal status, most of them have approved charters. The territories are defined, aims and tasks are agreed upon and activities are being implemented to fulfill these tasks. For more productive task implementation some changes are to be made in the territories of SPNAs: expansions aiming on inclusion of not yet represented ecosystems and migration stepstones for specific animal species.

Budget and staff are allocated to almost all evaluated SPNAs, with exception of Sanctuaries under the subordination of the RA Ministry of agriculture and the Institute of Physics. Undoubtedly the allocated budgets are not enough, though staff quantity satisfies current needs of the SPNAs. Staff knowledge bases and capacities are in general not sufficient and satisfactory. No training programs are being arranged and implemented. Technical supply is on average level, with gaps to be amended considering quantity and quality.

Though inventory of nature resources for PAs has been carried out, available data is not enough for optimal management.

The connection of PAs with local communities and population is obviously not enough and one sided in most cases. PAs support local population of no charge.

The development of tourism in PAs is not sufficient yet-additional investigations, financial support and involvement of new specialists is necessary.”

As examples for obviously positive activities in a RA State Sanctuary, recent initiatives in Plane Grove Sanctuary can be mentioned, such as the implementation of a tree nursery in 2006 as part of the MoNP’s ongoing restoration programme for Plane Grove. Staff of the Shikahogh SR SNCO in charge of management of the Sanctuary grows seedlings of oriental plane and walnut from seeds and grafts, in order to use the young trees for management interventions to support the natural regeneration.³² An illustrated folder on “Plane Grove State Reservation” with texts in Armenian and English and maps, edited by the MoNP, provides much comprehensive information on the Sanctuary³³.

³² Gevorgyan A., Metreveli K., Loiskandl G., Aghassyan A., Garforth M., for Transboundary Joint Secretariat for the Southern Caucasus, 2009: TJS Activity Plan on Biosphere Reserves, Report to prepare for the establishment of Shikahogh Biosphere Reserve, Armenia. Tbilisi

³³ Aghassyan A., Gevorgyan A., 2008: Plane Grove State Reservation. Illustrated folder with information texts and maps, RA Ministry of Nature Protection, Yerevan

RA State Sanctuaries – considered IUCN category IV PAs

The Ecoregional Conservation Plan for the Caucasus (Second Edition 2006) reports 164 Sanctuaries, Wildlife Refuges and other types of Protected Areas (Nature Parks, Protected Landscapes, etc.) considered as according to IUCN management categories IV to VI, depending on the established regime, covering approximately 5.5 percent of the Caucasus Ecoregion. However, according to expert analysis, only 56 of these (covering 2.1 percent of the Ecoregion) correspond to IUCN category IV.³⁴

In fact the Law of the Republic of Armenia On Specially Protected Nature Areas does not at all explicitly refer to or mention the international definition of a Protected Area and the Protected Area management categories I to VI given by IUCN.

However, the four categories of SPNAs stated by this RA law are widely considered as meeting the requirements of IUCN PA management categories Ia, II, III and IV.

As for the RA State Sanctuaries, Gevorgyan A. and Aghasyan A. (2008)³⁵ consider them as “belonging to IUCN category IV - Habitat/ Species Management Area” or “mainly corresponding to IUCN category IV”.³⁶

In a brochure of the Caucasus Protected Area Fund (2008) Nature Sanctuaries in the South Caucasus are described as in comparison to Strict Nature Reserves and National Parks “a some-what lower category of protection, broadly similar to IUCN category IV”.³⁷

In the report “Biodiversity Analysis Update for Armenia” (2008) the RA State Sanctuaries were mentioned as corresponding to IUCN category IV. However, IUCN’s categories were judged as equivalent in name only (Reserve, National Park). And further this 2008 report mentioned: “The situation on the ground in Armenian State Reserves and National Parks does not actually correlate with IUCN categories Ia and II. Conservation and active management of Armenia’s PA network is limited. The 2000 Biodiversity Analysis stated that “only a small proportion of the State Reservations (meaning the PAs now named as Sanctuaries) have been actually established. While the situation has improved there are still large gaps in conservation and management”.³⁸

³⁴ Williams L. (editor), Zazanashvili N., Sanadiradze G. and Kandaurov A., 2006: An Ecoregional Conservation Plan for the Caucasus. Second Edition.

³⁵ Gevorgyan A. and Aghasyan A., 2008: Current State of the Specially Protected Nature Areas of the Republic of Armenia.

³⁶ Gevorgyan A. and Aghasyan A., 2009: Recommendatory Guidelines on Development of Management Plans for the RA Specially Protected Nature Areas.

³⁷ Caucasus Protected Area Fund, 2008: Saving Europe’s Last Wilderness

³⁸ ECODIT Inc. Team, 2008: Biodiversity Analysis Update for Armenia