









Delivering on CBD Commitments CAUCASUS ECOREGION



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INTRODUCTION

This brochure is produced under the aegis of the Caucasus Biodiversity Council with the support of the Protected Areas for a Living Planet (PA4LP) project - a collaboration of the

Swiss-based MAVA Foundation and WWF - to support the implementation of the Convention on Biological Diversity (CBD). It gives an overview of progress on the implementation of the CBD's Programme of Work on Protected Areas between 2004 and 2011 and identifies future priorities for Protected Area (PA) work and CBD implementation in the region. Its aim is to demonstrate the value of a partnership approach to implementing the CBD and other international agreements in the Caucasus and to encourage the strengthening of these partnerships to address future challenges and priorities in the region.

From 2007 to 2011 PA4LP has enabled governments, NGOs, and other stakeholders to come together to support the establishment of new PAs, the creation of management plans of existing PAs, the drafting of legislation and the coordination of efforts between countries on achieving CBD targets.

The results of the 2011 review of implementation of the CBD's Programme of Work on Protected Areas (PoWPA) in the Caucasus Ecoregion are summarized below. PoWPA implementation was reviewed in five countries of the Caucasus Ecoregion - Armenia, Azerbaijan, Georgia, Russia and Turkey. In these countries PA4LP supported strong national and regional level partnerships of donors, governments, scientists and civil society which assisted governments in delivering on CBD Protected Areas commitments. This partnership approach made a significant contribution to meeting CBD targets and the strengthening of PA systems in the Caucasus.

This five year project would not have been successful without good will and effective partnership between all stakeholders. But much remains to be done to strengthen PA systems in the region: the last chapter highlights key developments and defines future priorities to meet targets of the PoWPA as well as setting out further opportunities for partnerships.

It is hoped that this brochure will stimulate discussion on the value and lessons learned from PoWPA implementation over the last eight years and motivate partners to come together to meet future challenges!

I. PROGRAMME OF WORK ON PROTECTED AREAS

The Programme of Work on Protected Areas (PoWPA) of the Convention on Biological Diversity, adopted by the seventh CBD Conference of the Parties (February 2004, Kuala Lumpur, Malaysia), is a worldwide effort to reduce the current rate of biodiversity loss at the global, regional, national and sub-national levels. Its overall purpose is "to support the establishment and maintenance of terrestrial areas by 2010 and of marine areas by 2012 to ensure comprehensive, effectively managed, and ecologically representative national and regional systems of protected areas".

The PoWPA consists of four interlinked and cross-cutting implementation components:

- Planning, Selection, Establishment, Strengthening, and Management of Protected Area Systems and Sites;
- Governance, Participation, Equity and Benefit Sharing;
- Enabling Activities; and
- Standards, Assessment and Monitoring which feature goals and time-bound activities specific to protected areas.

The PoWPA assists countries to establish their own national programmes of work with targeted goals, actions, specific actors, time frame, inputs and expected measurable outputs. The ultimate goal of PoWPA implementation is the establishment and maintenance of an efficiently managed, ecologically representative national and regional system of protected areas that is integrated into a global network of protected areas, where human activities are managed to maintain the structure and function of ecosystems to achieve a significant reduction in the rate of biological diversity loss and provide benefits for present and future generations.

Along with new target for Protected Areas (see below) a special decision on protected areas was adopted by the CBD at COP 10 in Nagoya, Japan in September 2010 (Decision X/31). The Decision indicates strategies for strengthening PoWPA implementation at national, regional and global levels, and identifies issues that need greater attention. It is worth noting that ongoing activities on protected areas in the Caucasus Ecoregion, and particularly those supported by the Protected Area for a Living Planet project, are in line with the recommendations included in the COP10 Decision. These include: the promotion of connectivity and ecological networks; the integration of protected areas into broader landscapes; support for regional initiatives related to protected areas by non-governmental organizations and other funding organizations.



Target 11

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

The Caucasus is one of WWF's 35 Priority Places selected from 200 globally outstanding Ecoregions and one of 34 global biodiversity hotspots identified by Conservation International.

The Caucasus Ecoregion / Hotspot spans 580,000 km2 of mountains in Eurasia, between the Black and the Caspian seas. It includes all of Armenia, Azerbaijan and Georgia, the North Caucasus portion of the Russian Federation, north-eastern Turkey and part of north-western Iran.

The region's unique geology and landscape, consisting of three major mountain chains separated by valleys and plains, have led to the development of a variety of microclimates, soils and vegetative conditions that support a broad range of ecosystems and an unusually high level of species diversity for the Temperate Zone.

The Caucasus has the greatest biological diversity of any temperate forest region in the world. It includes around 7,500 species of vascular plants, out of which about 2,600 (35%) are endemic to the region. This is the highest level of vascular plant endemism in the temperate zone of the northern hemisphere. Forests, high mountains, wetlands, steppes, semi-deserts and deserts contain more than twice the plant and animal diversity found in adjacent regions of Europe and Asia. At least 153 mammals inhabit the Caucasus Hotspot, one-fifth of which are endemic. Around 400 species of birds are found here including four endemics. The coasts of the Black and the Caspian seas, as well as South Caucasus plateaus are important stop-over sites for millions of migratory birds which fly over the isthmus each spring and autumn between their breeding and wintering grounds. Twenty-one of the 87 reptile species are endemic to the hotspot and 17 species of amphibian are found, of which four are endemics. More than a third of the total of 200 species of fish in the rivers and seas of the hotspot are found nowhere else in the world. In addition to its outstanding biological value, the Caucasus Hotspot offers wide cultural diversity, where a multitude of ethnic groups, languages and religions intermingle over a relatively small area.









III. PROGRAMME OF WORK ON PROTECTED AREAS IN THE CAUCASUS

KEY HIGHLIGHTS

- Over one million ha of new protected areas established since 2004 and about half a million ha currently under establishment
- Increased governmental funding in Armenia, Azerbaijan, Georgia and Russia
- National and sub-national multi-stakeholder cooperation mechanisms and strong partnerships in place in five countries to support CBD implementation, including PoWPA
- Assessments of gaps in legal and institutional environments, PA management effectiveness, capacity
 and sustainable financing completed for most countries and action plans developed to address identified gaps
- Caucasus Biodiversity Council the only international coordination body in the region is promoting cooperation between the countries that share the Ecoregion and supporting the exchange of expertise, species reintroduction and the development of transboundary PAs and corridors
- Caucasus Nature Fund the first effort to create sustainable financing mechanism of PAs at regional level- is supporting five PAs with total annual grants of US\$ 1.5 million and aims to support 15 PAs by 2015
- Caucasus Biodiversity Monitoring Network the first biodiversity monitoring tool at regional level was launched in 2010 covering Armenia, Azerbaijan and Georgia and aims to extend to include the whole Ecoregion



1. MULTI-STAKEHOLDER COOPERATION MECHANISM

The PoWPA has stimulated strong partnerships as well as coordinated multi-stakeholder initiatives for protected areas systems in the Caucasus, which have resulted in significant achievements as well as clear vision for the future development of the region's PA network.

Caucasus Biodiversity Council

The Caucasus Biodiversity Council (CBC), functioning since 2004, is the only regional coordination body consisting of officially nominated government representatives and NGO delegates from all six countries of the Ecoregion. The council invites academics to participate in its meetings, which are organized twice a year. Since its establishment, the CBC has proven invaluable to conservation in the region, not only by promoting and monitoring the implementation of the Caucasus Ecoregional Conservation Plan, but also by facilitating the implementation of regional programs and projects. CBC also provides a forum for the exchange of opinions and promotes regional and transboundary cooperation. Among other relevant international commitments and programs in recent years the CBC significantly contributed to the PoWPA implementation in the Caucasus.

Mechanisms for National Level Coordination

Multi-stakeholder coordination mechanisms have been established in Armenia, Azerbaijan, Georgia, Russia and Turkey with the main objective of ensuring coordination and favorable conditions for the successful implementation of the PoWPA. This is achieved through setting priorities and engaging key partners and stakeholders in the PoWPA implementation process. In the case of Armenia, Azerbaijan and Georgia partners coordinate through National Coordination Committees; in Russia through the Council for Protected Areas of the Northern Caucasus; and in Turkey organisations come together under the Steering Committee and the Protected Areas Technical Group. These multi-stakeholder bodies organize periodic meetings to review the ongoing implementation of PoWPA in their respective countries and set priorities.

2. NATIONAL PROTECTED AREA SYSTEMS

Protected Areas within the Caucasus Ecoregion

Protected Areas have been recognized as the cornerstone of biodiversity conservation in the Caucasus for almost a century. There are several different national categories of PA in the Caucasus which correspond to IUCN categories:



Including all categories, there are now 1,163 PA sites in the Caucasus Ecoregion, covering 12.7 percent of total area. Protected Areas with IUCN categories I to IV status cover around 10 percent of the Ecoregion. Since 2004, through the creation of new protected areas and expansion of existing ones, protection of the Ecoregion was extended by nearly 1.9 percent. However, the current PA system in the Caucasus is neither sufficiently large nor ecologically representative enough to effectively conserve the region's unique biodiversity. There is still a need for additional efforts to develop an effectively manage protected area system in the Ecoregion which is effectively linked through ecological corridors based on integrated landscape planning.

Armenia launched its protected areas system in 1958 with the creation of Strict Nature Reserves and Sanctuaries. Presently, protected areas cover nearly 12.8 percent of the country's territory (including Lake Sevan), and comprise three Strict Nature Reserves, four National Parks and 26 Nature Sanctuaries and 230 natural monuments. Since 2004 PA coverage in Armenia was increased by nearly 21 percent through the creation of new National Parks and Nature Sanctuaries. In 2009 the Government approved 230 new Natural Monuments and the precise territories of these new PA will be defined over the next three years.



Azerbaijan's system of strictly protected nature reserves was initiated in 1925, when the Gey-Gel Strict Nature Reserve was created in the Lesser Caucasus. Presently, protected areas cover nearly 10.2 percent of the country's territory and comprise 11 Strict Nature Reserves, eight National Parks, 24 Nature Sanctuaries and number of natural monuments. Azerbaijan has been very successful in establishing protected areas in recent years. Since 2004 Azerbaijan has increased PA coverage by nearly 85 percent by establishing new National Parks and Nature Sanctuaries and extending existing Strict Nature Reserves.

Georgia's protected areas cover nearly 7.1 percent of the country's territory and comprise 16 Strict Nature Reserves, 9 National Parks, 14 Natural Monuments, 14 Sanctuaries and two protected landscapes. Additionally, there are five Multiple Use Territories which have been legally established although their exact area has still to be defined. Several new protected areas are in the planning stage and need to be further developed and approved, including new priority Natural Monuments which are an important category for the future development of the PA system in Georgia. Since 2004 PA coverage in Georgia has increased by nearly 11 percent through the creation of new National Parks, Sanctuaries and Natural Monuments.





Turkey founded its first national park in 1958 and now has around 305 different categories of protected areas covering about 4.5 percent of the country's entire territory. Presently, protected areas in the Caucasus part of Turkey cover 7.7 percent of the region corresponding to 0.7 percent of the country's territory. Four Strict Nature Reserves, seven National Parks and 11 Wildlife Reserves and Nature Parks cover 7.4 percent of the Turkish Caucasus while 13 Natural Monuments and a Biosphere Reserve cover the remaining 0.3 percent. Since 2004 PA coverage in the Turkish Caucasus has increased by nearly 1.9 percent through creation of new National Parks and a Biosphere Reserve.

Gap Analysis

In the Southern Caucasus countries, a PA system gap analysis was initiated in Armenia in 2009 and at the same time background studies were carried out in Azerbaijan and Georgia. In Georgia, priority areas for conservation of key forest ecosystems were identified in 2005. Russia completed a national PA gap analysis in 2009, which was the first of its kind for the country in which a unified scientific and methodological approach was applied. Turkey started a PA gap analysis since 2002, and has completed it for almost half of the country. In early 2010 this assessment was expanded to Northern part of Turkey including the West Lesser Caucasus Corridor and was finalized in 2011.





Russia currently has more than 12, 000 national, regional and local protected areas that cover 200 million hectares or 11.9 percent of the country's territory. The first strict nature reserve in the Russian Caucasus was established in 1924. Presently, protected areas in cover 17.4 percent the Russian Caucasus, Nine Strict Nature Reserves (four Nature Biosphere Reserves), three National Parks, five Nature Parks and 110 Nature Sanctuaries cover 13.6 percent of the Russian part of the Caucasus while hundreds of Natural Monuments and tens of Resorts and Health Spas with federal, regional and local status cover a remaining 3.8 percent of the area. Since 2004 PA coverage in the Russian Caucasus increased by nearly 1.8 percent through creation of new Nature Reserves, Nature Parks and Nature Sanctuaries.





3. PROTECTED AREA CONNECTIVITY

The concept of ecological networks, including connectivity and integration at policy and practical-site levels, is not adequately acknowledged in the Caucasus countries. However, it is increasingly recognized that the traditional approach of focusing on the protection of individual sites and species is not effective or sufficient in the long term, and a wider landscape approach is crucial for biodiversity conservation and maintaining ecological processes and ecosystem services.

The development of PA connectivity and the concept of an ecological network are challenging; the main constraints are a lack of methodological approaches and the absence of ecological connectivity policies in the region. This makes it also difficult to integrate PAs into sectoral plans and strategies.

There is an example of Ecological Network planning in the Russian part of the Greater Caucasus Corridor, where an ecological network scheme was developed based on an analysis of satellite images, biodiversity data, as well as landscape and topographical maps. The Ecological Network scheme stretches for nearly 1,500 kilometres along the northern Greater Caucasus, from the Black Sea to the Caspian Sea, and sets out a plan to incorporate protected areas and multiple-use areas into a continuous, efficiently managed system.

A second Ecological Network scheme exercise is currently being carried out in the Georgian part of the West Lesser Caucasus by designing ecological corridors using GIS. It is being developed using orthophotos, topographic and forestry maps, as well as habitat modelling for umbrella species. Both schemes have been developed under the concept of connectivity, which seeks to maintain or restore ecological functions as a means to conserve biodiversity, while also providing appropriate opportunities for the sustainable use of natural resources by using different natural or semi-natural landscapes.





4. REGIONAL NETWORKS AND TRANSBOUNDARY PROTECTED AREAS

Ecoregional Conservation Plan

The Ecoregional Conservation Plan (ECP) creates a roadmap for biodiversity conservation in the Caucasus and defines long- and medium-term targets as well as a set of concrete actions (wwf.panda.org/caucasus/ecp). Four priority biomes – forest, freshwater, marine and high-mountain, contain the bulk of biodiversity in the Ecoregion and were selected as priorities for conservation. Within these biomes, 26 focal species, 56 priority conservation areas (PCA) and 60 wildlife / priority conservation corridors to ensure connectivity between PCA were identified. Out of these PCAa and corridors, six are in Armenia, 25 in









Azerbaijan, 13 in Georgia, 21 in Russia, six in Turkey, 15 in Iran and 30 are transboun-dary. According to the ECP protection should be extended by 2025 for an additional ten percent of forests, five percent of freshwater ecosystems, five percent of marine and coastline ecosystems and eight percent of highland ecosystems. In 2011 the ECP shortterm targets were revised under coordination of the Caucasus Biodiversity Council (CBC) considering CBD 2020 Goals and Targets.









scale, 10 regional conservation corridors were identified in the Caucasus, based on their importance for biodiversity conservation. Of these, five corridors were determined as priorities for CEPF investment. 2011-2013 will be a consolidation phase of CEPF investments, which will address the enlargement of the PA system.



Caucasus Biodiversity Hotspot Ecosystem Profile

The Caucasus Biodiversity Hotspot Ecosystem Profile (wwf.panda.org/caucasus/cepf) was developed and implemented under the framework of investment strategies of the Critical Ecosystem Partnership Fund (CEPF) from 2004-2009. As a result of scientific definitions of conservation outcomes forming an Ecosystem Profile, a total of 50 globally threatened target species were identified and 205 priority sites were defined for the target species across the Caucasus covering 19 percent of the hotspot. On a larger spatial



Transboundary Protected Areas and Cooperation

Key transboundary priority conservation areas for biodiversity in the Caucasus have been identified; however the development of transboundary cooperation is a complex process involving many actors. Governments must agree on common objectives and actions related to the designation and management of a transboundary area. To date, transboundary cooperation has been initiated between Armenia-Georgia and Georgia-Turkey.

Transboundary Protected Areas between Armenia and Georgia

The new Lake Arpi National Park in Armenia and the Javakheti National Park in Georgia are situated in the Shirak-Javakheti transboundary priority conservation area. This territory of around 3,000km2 with an average altitude of 2,000 m straddles the border area between Armenia, Georgia and Turkey. The governments of Armenia and Georgia have agreed to establish coordination between these two new PAs with the aim of developing a common vision, objectives and implementation of joint programs.





Transboundary Cooperation between Georgia and Turkey

In 2010, the Governments of Georgia and Turkey signed an agreement to cooperate in the field of environment and forestry including PAs. There is a wide range of activities to strengthen transboundary cooperation on PAs between Georgia and Turkey, such as bilateral meetings between representatives of government, NGOs and academia, as well as the creation of joint working groups and exchange programs. The introduction of the Goitered Gazelle has been undertaken by transporting animals from Turkey to Georgia for further captive breeding and re-introduction into the wild.

In the West Lesser Caucasus Corridor, the Natural-Landscape Territory of Mtirala and Machakhela was created with a combined area of 22,941 hectares, through the development of a spatial planning document. The next step is to establish Machakhela National Park and Protected Landscape (totally around 12,000 hectares). Georgia's Machakhela protected area and Turkey's Jamili Biosphere Reserve will cooperate further using a transboundary approach.





5. INSTITUTIONAL AND SOCIO-ECONOMIC ENVIRONMENT

Policy and Institutional Environment Assessment

National legal frameworks regulate PA planning, governance and management, and define the relevant responsible institutions and parties.

During 2007-2008, assessments of legislative and institutional gaps and barriers were carried out in Armenia, Azerbaijan, Georgia, Russia and Turkey. Key players from Governmental and non-governmental sectors were involved in the assessment process. Armenia and Georgia developed Action Plans for the improvement of PA-related national legislation and institutional structure while Azerbaijan drafted new amendments and regulations to Protected Areas legislation. Later in 2010, based on legislative assessment the revision of the Law on Specially Protected Nature Areas was initiated in Armenia. In Russia, based on the assessment results, proposals for improving the existing PA legislation were developed and a new version of the Federal Law "On Specially Protected Natural Areas" was drafted. Across the region recommended and planned actions based on the assessments include the harmonization of sectoral policies and laws to support more effective delegation of responsibilities between concerned institutions to ensure effective PA planning, governance and management. Huge efforts by key stakeholders and the willingness of governments are still required to support the process to ensure effective legislative changes are put in place.









Governance and participation

Protected areas in the Caucasus are under public ownership and managed by governmental institutions. PA national legislations in Azerbaijan, Georgia, Russia and Turkey do not acknowledge other models of PA governance. However, the law on protected areas in Armenia defines different types of PA governance and describes mechanisms to transfer management responsibilities to local governing institutions. In Armenia, all PAs are managed by the Government and the first pilot initiative to create different models of PA management was launched in 2011. There are obstacles to the promotion of innovative forms of governance such as a lack of relevant legislation, local cultural contexts and awareness or understanding of the issue, as well as lack of experience and best practices.

Public participation is increasingly recognized as indispensable for gaining local community support for the establishment of new PAs. Generally relevant national legislation acknowledges the importance of participation and consultations with local communities in planning and managing PAs to some extent. Involvement of local communities and other stakeholders is sometimes ensured through special public hearings, advisory boards or stakeholder councils for individual protected areas, stakeholder working groups at the planning stages and local management committees at the management stage. However this issue still needs to be addressed and improved: the level of involvement of local population in making decisions directly related to their interests is still relatively low and hence, ineffective. Strengthening the adaptive and collaborative planning and management of PAs is one of the most significant recommendations to avoid conflict of interests, maximize biodiversity conservation efforts and consider the needs of local communities.

Equity and benefits: economic evaluation of biodiversity The Economics of Ecosystems and Biodiversity (TEEB) study is a major international initiative to draw attention to the global economic benefits of biodiversity, to highlight the growing costs of biodiversity loss and ecosystem degradation and to enable practical actions on integration of PA value and economic benefits into Sectoral Plans and Strategies.

National-level assessments of the contributions of PA to the countries' economy and culture are quite new and are gradually drawing the attention of national governments. There are few cases of PA benefit assessments and valuation of ecosystem services in the Russian part of the Caucasus.

Studies of two national parks in Georgia revealed that PAs are indispensable to sustain the economic benefits of tourism and nature-based tourism in the country. At the same time, PAs under sustainable ecosystem management can contribute to poverty alleviation and equity and provide a range of opportunities to establish payments for environmental services and other potential PA financing mechanisms.

The most important task is still ahead - conduct national TEEB studies and work out national strategies for further integration of biodiversity in development of green economies.







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Management Planning

Management planning has long been recognized as the first crucial step for proper establishment and effective management of protected areas in the region and this is starting to be reflected in the national legislation and strategic documents of some countries in the Ecoregion. The development and official adoption of PA management plans is now obligatory in Georgia. National legislation in Armenia states that management plans of specially protected natural areas should be developed according to methods approved by the authorized state body. In Russia all nature reserves and national parks are required to prepare management plans. In Azerbaijan each PA has its own regulations approved by the Cabinet of Ministers.

Some basic capacity-building activities were carried out to support the management planning process. Guidelines have been developed on (i) National Park Management Planning in the South Caucasus by Transboundary Joint Secretariat (TJS); (ii) Management Planning for Protected Areas in Georgia and (iii) Development of Management Plans for the Specially Protected Nature Areas in Armenia. Training modules on themes related to PA management were prepared in Georgia and trainings provided to PA staff. Over the last five years numerous training courses and exchange study tours have been organized for PA managers and staff throughout the region. Despite these capacity-building and enabling efforts developing PA management plans remains a high priority for the Caucasus countries and this weakness needs to be adequately addressed.

Management Effectiveness

The evaluation of management effectiveness is a vital component of responsive and proactive protected area management. In the period of 2008-2009, Protected Areas Management Effectiveness assessments were carried out in all countries across the Ecoregion. The assessment process used the Rapid Assessment and Prioritization of Protected Areas Management (RAPPAM) methodology with the wide participation of key stakeholders. The assessment process completed through stakeholders' workshops, revealed strengths, weaknesses, pressures and threats at both system and site level. The final assess-



ment reports detailed recommendations to improve the PA system in each country. In the Southern Caucasus Countries the assessment results were used to develop national PA Capacity Development Action Plan. Additionally, management effectiveness of some individual PAs in Armenia and Turkey was assessed using the Management Effectiveness Tracking Tool (METT). In total, management effectiveness of around 80% of the PAs was assessed in the region. The next important step is to follow up on the assessment recommendations and action plans.

Threats

Protected Area threats and risks assessments were conducted as part of the PA management effectiveness assessments. The assessments identified the most prevalent threats in the region as well as those Pas which are most threatened. All countries of the Ecoregion have relevant legislation which sets out procedures for Environmental Impact Assessments which are required for development projects or any activities which may directly or indirectly affect protected areas. In some case, such legislation requires public hearings and consultations. In several countries there are legal norms on liability and redress for illegal activities However, there are many local threats to PAs which are not adequately monitored or controlled. Addressing these threats should be a priority for future work in the region if the PA system is to be managed effectively.







7. CAPACITY AND APPROPRIATE TECHNOLOGIES

A capacity needs assessment is an important first step in improving the management of PA system. It identifies needs at both institutional and site level and links directly to PA management planning and effectiveness. In 2007-2008, PA Capacity Needs Assessments were carried out in Armenia, Azerbaijan, Georgia and Turkey. Based on the results of these assessments, Capacity Development Action Plans were developed in Armenia, Azerbaijan and Georgia with the active involvement of key stakeholders. The Plans provide detailed actions and timelines for building capacity for human resource development; management planning; infrastructure development; enhancement of legislation; research, data and inventory management; protected areas system management; innovative approaches and technologies; sustainable financing; collaboration and partnerships; public awareness and education; and inter-sectoral collaboration and intra-organizational development.

Based on the needs identified in the assessments there are many efforts underway to address human resources capacity-building in the Caucasus countries. For example, in Azerbaijan, the Skill Upgrading Institute under the Ministry of Ecology and Natural Resources provides trainings for PA staff on a regular basis. In Russia, a special PA Training Centre is functioning within the Environmental Education Center and in Turkey, most training provided through different projects and initiatives. In addition, government and donors have supported the improvement of technical and infrastructure capacity several PAs in Armenia, Azerbaijan and Georgia (infrastructure development, technical equipment, new management, etc.) including: Khosrov and Shikahogh reserves, Arpi Lake and Arevik National Parks and Zangezur Sanctuary in Armenia; Akhar-Bakhar section of Illisu reserve and Shirvan National Park in Azerbaijan, and Mtirala and Djavakheti National Parks and some other protected areas in Georgia.

There are several national and site-level capacity gaps in the Caucasus PA system. Many one-off and short-term capacity building activities take place without ensuring any long-term national capacity-building. This issue, recommended in the conducted assessments, should be addressed in a more strategic way in the region through partnerships and joint efforts by key stakeholders such as governmental institutions, donor agencies, non-governmental organizations and scientists.

8. SUSTAINABLE FINANCING

As underlined in the CBD COP10 decision on protected areas (X/31), one of the fundamental needs of an effective PA system is sustainable financing. National level financial needs assessments were carried out in Armenia, Azerbaijan and Turkey and based on these results Sustainable Financing Plans were developed for Armenia and Azerbaijan while key recommendations were produced for Turkey. A similar assessment is currently being carried out in Georgia.

Protected area systems in the region are principally funded by the Governments through national state budgets although there is also a significant amount of donor. Government funding has significantly increased in recent years yet remains far below the optimal levels.

Caucasus Nature Fund

The Caucasus Nature Fund (CNF) is a conservation trust fund established to safeguard the Caucasus Ecoregion. CNF's mission is to help protect and strengthen the existing network of protected areas in Caucasus by providing matching grants, management assistance and local capacity building to sustain the parks for generations to come.

CNF is aiming to increase its support from 5 parks in 2011 to 15 parks in 2015. The 15 target parks are located in Armenia and Georgia and cover over 650,000 hectares. A pilot project could be launched in Azerbaijan as early as 2012 at which time the target would be increased to 18 parks. Started in 2008, with support from WWF, CI, and the German government, CNF has a current endowment of \$20 million and is able to offer grants totalling \$1.5 million annually. Contributions to its endowment are invested and only investment earnings are spent on nature conservation. CNF uses an innovative "50% model" of public-private partnership that incentivizes governments to contribute at least half the costs of operating the PAs. This strategy assures national ownership and investment. For more information please visit CNF's website: www.caucasus-naturefund.org



9. RESEARCH AND MONITORING

Research and monitoring are crucial components of planning and managing protected areas. The level of research and monitoring activities in the Caucasus differs according to country. In some countries, PA administrations are responsible for annual research and monitoring of biodiversity. In some cases there are joint research projects in cooperation with scientific institutions. However, this approach is often inadequate as it depends on the interests of the scientific sector and is staffed by external scientists. The effectiveness of research and monitoring also varies according to the quality of national PA databases. Regular research and monitoring at both site and system level still requires urgent development.

The Caucasus Biodiversity Monitoring Network (CBMN)

CBMN was developed in 2010-2011 is the first regional biodiversity monitoring tool in the Caucasus (www.wwfcaucasus.net/cbmn). The CBMN directly contributes to the implementation of CBD targets and represents a long-term biodiversity monitoring system. Its main objectives are: assess the status and trends of biodiversity and ecological processes; to identify conservation needs and priorities; and to address upcoming threats to biodiversity. Indicators set for the PA system give an opportunity to monitor main trends and dynamics in a PA system, to get information on PA management and to measure outcomes being achieved in relation to PoWPA goals and targets. The CBMN encompasses all countries of the Caucasus Ecoregion, however, it currently only operates in the Southern Caucasus Countries of Armenia, Azerbaijan and Georgia. There are plans for its further expansion throughout the Ecoregion which needs further funding.



IV. FUTURE NEEDS AND PRIORITIES

The PA4LP project together with other large projects has supported governments in delivering on CBD PoWPA targets. Without effective cooperation and partnership between stakeholders and key actors, the significant progress on improving PA systems achieved in recent years would not be possible. This partnership approach has created a solid foundation for further development of protected area systems in the Caucasus. The five year project has shown how so much more can be achieved when partners work together on the common framework provided by the CBD. This partnership approach could be used as a model to support future implementation of international agreements at national, regional and field level. At the same time, there is still lot of room for strengthening partnerships between the key actors to adequately meet the urgent challenges that need to be addressed in the region. It is hoped that the partnership approach promoted by PA4LP can be built on in future years to further strengthen biodiversity conservation in the Caucasus.

The main priorities for future PA and biodiversity work in the Caucasus include:

- grammes
- decision-making
- protected areas
- legislation and strengthening of multi-stakeholder cooperation
- PA systems
- financial sources and promoting innovative financing mechanisms
- capacity development programmes
- communities

• Promoting an effective Ecological Network in the Caucasus Ecoregion through the planning and establishment of ecological corridors that take into account climate change trends

• Integrating PAs and biodiversity into national development and financing strategies and pro-

• Identifying and promoting the economic values and other benefits of ecosystems and protected areas at local and national level through the evaluation of benefits and the application of TEEB and other innovative approaches that integrate the value of natural systems in

• Maintaining effective international cooperation on conservation through the Caucasus Biodiversity Council and implementation of the Caucasus Ecoregional Conservation Plan

• Developing programmes for raising public awareness on the importance of biodiversity and

• Ensuring harmonized policy, institutional and legal environments through the perfection of

Completing gap analysis work and establishing new PAs to ensure ecologically representative

• Putting sustainable and adequate financing mechanisms in place through diversification of

• Ensuring adequate capacity in human and technical resources are in place through long-term

 Strengthening the adaptive and collaborative planning and management of PAs to avoid conflict of interests, maximize biodiversity conservation efforts and consider the needs of local

• Ensuring well-equipped PA databases and monitoring systems are in place at site level

KEY GOVERNMENTAL INSTITUTIONS, DONORS AND PARTNERS

Their willingness and generous contribution, joint efforts and partnership made possible the progress throughout PoWPA in the Caucasus

The Ministry of Nature Protection of Armenia The Ministry of Ecology and Natural Resources of Azerbaijan The Ministry of Environment Protection of Georgia The Ministry of Natural Resources of the Russian Federation The Ministry of Forestry and Water Affairs of Turkey The Ministry of Environment and Urbanism of Turkey

Global Environmental Facility (GEF) The World Bank (WB) United Nations Development Programme (UNDP) KfW Entwicklungsbank (KfW) German Federal Ministry for Economic Cooperation and Development (BMZ) German Federal Agency for Nature Conservation (BfN) German Federal Ministry for the Environment (BMU) Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) The U.S. Agency for International Development (USAID) and International Technical Assistance Program of the United States Department of Interior (USDOI-ITAP) Government of Norway MAVA Fondation Pour La Nature (MAVA Foundation) The Critical Ecosystem Partnership Fund (CEPF - a joint initiative of l'Agence Française de Développement, Conservation International, the Global Environment Facility, the Government of Japan, the John D. and Catherine T. MacArthur Foundation and the World Bank) Conservation International (CI)

The John D. and Catherine T. MacArthur Foundation (MacArthur Foundation)

WWF-Armenia Branch, WWF-Azerbaijan Branch, WWF-Caucasus Programme Office,
WWF-Russia, WWF-Turkey
The International Union for Conservation of Nature (IUCN)
Caucasus Nature Fund (CNF)
The Regional Environmental Centre for the Caucasus (REC Caucasus)
Transboundary Joint Secretariat for the Southern Caucasus (TJS)
Fauna and Flora International (FFI)
Michael Succow Foundation for the Protection of Nature
National NGOs: NACRES (Georgia), Ornithological Society (Azerbaijan),
Fund for Biodiversity Conservation of Armenian Highland.

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