

# BIODIVERSITY ANALYSIS UPDATE FOR AZERBAIJAN: AZERBAIJAN BIODIVERSITY INTEGRATION OPPORTUNITIES

FINAL REPORT – VOLUME II OF II

Prosperity, Livelihoods and Conserving Ecosystems (PLACE) IQC Task Order #7

January 2010

This report was produced for review by the United States Agency for International Development. It was prepared by ECODIT for the **Biodiversity Analyses Update for Georgia and Azerbaijan**, Task Order No. EPP-I-07-06-00010-00.

# AUTHORITY

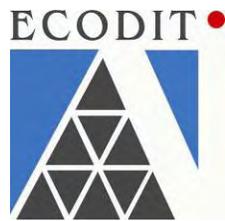
Prepared for USAID/Caucasus under Prosperity, Livelihoods and Conserving Ecosystems (PLACE) Indefinite Quantity Contract number EPP-I-07-06-00010-00, Task Order #07, awarded 28 September 2009, entitled “Biodiversity Analyses Update for Georgia and Azerbaijan.”

The Biodiversity Analysis Update for Azerbaijan report is made possible by the support of the American People through the United States Agency for International Development (USAID). The contents of this report are the sole responsibility of ECODIT and do not necessarily reflect the views of USAID or the United States Government.

## AZERBAIJAN BIODIVERSITY UPDATE TEAM

(Pat Foster-Turley and Elchin Sultanov)

## ASSEMBLED BY ECODIT, INC.



ECODIT, Inc.

1800 N. Kent Street, Suite 1260  
Arlington, VA 22209  
USA  
Tel: +1 703 841 1883  
Fax: +1 703 841 1885  
Web: [www.ecodit.com](http://www.ecodit.com)

# BIODIVERSITY ANALYSIS UPDATE FOR AZERBAIJAN: AZERBAIJAN BIODIVERSITY INTEGRATION OPPORTUNITIES

## **DISCLAIMER**

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

[this page intentionally blank]

# TABLE OF CONTENTS

INTRODUCTION ..... 1

STRATEGIC OBJECTIVE 1: GROWTH AND DEVELOPMENT OF COMPETITIVE PRIVATE ENTERPRISES  
ACCELERATED ..... 2

STRATEGIC OBJECTIVE 2: MORE REPRESENTATIVE, PARTICIPATORY AND BETTER FUNCTIONING  
DEMOCRACY ..... 2

STRATEGIC OBJECTIVE 3: INCREASED USE OF QUALITY HEALTH CARE SERVICES AND PRACTICES..... 3

ANNEX A: SUMMARY OF THREATS AND RECOMMENDATIONS FROM THE JANUARY 2010 AZERBAIJAN  
BIODIVERSITY ANALYSIS REPORT ..... 4

## Acronyms

Although an effort was made to reduce the number of acronyms used in this text, in some cases this was necessary. Whenever the acronym or abbreviation appears the first time it is defined in the text. The following list is provided for ease of the readers of this document.

AEWA	Agreement on the Conservation of African-Eurasian Migratory Water birds
AO	Assistance Objective
AOS	Azerbaijan Ornithological Society
ABA	Azerbaijan Biodiversity Analysis
ABIO	Azerbaijan Biodiversity Integration Opportunities
CAS	Country Assistance Strategy
CBO	Community Based Organization
CENN	Caucasus Environmental NGO Network
CEPF	Critical Ecosystems Partnership Fund
CMS	Convention on Migratory Species
CI	Conservation International
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EU	European Union
FAA	Foreign Assistance Act
GCC	Global Climate Change
GDA	Global Development Alliance
GEF	Global Environmental Facility
GIS	Geographic Information System
GoA	Government of Azerbaijan
GTZ	German Technical Corporation
IBA	Important Bird Area
ICARDA	International Center for Agricultural Research in Dry Areas
ICZM	Integrated Coastal Zone Management
IWNRM	Sustained Integrated Watershed and Natural Resource Management
IR	Intermediate Result
IUCN	International Union for the Conservation of Nature

KfW	German Bank for Reconstruction and Development
LEPL	Legal Entity of Public Law
MENR	Ministry of Ecology and Natural Resources
MoE	Ministry of Environment of Azerbaijan
NBSAP	National Biodiversity Strategy and Action Plan
NEAP	National Environmental Action Program
NGO	Non Governmental Organization
PA	Protected Area
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
USAID	US Agency for International Development
WB	The World Bank
WWF	World Wildlife Fund

## Introduction

In accordance with the United States Government's FAA Section 119(d)(2), a 1) Biodiversity Analysis that identifies: "The actions necessary in a country to conserve biological diversity and 2) a Biodiversity Integration Opportunities report that outlines "the extent to which the actions proposed for support by USAID meet the needs thus identified" is required to inform the mission when new assistance strategies are being developed. This Azerbaijan Biodiversity Integration Opportunities (ABIO) report addresses the second FAA requirement. It was prepared in parallel with the Azerbaijan Biodiversity Analysis (ABA) by a team of one international biodiversity specialist and one Azerbaijani biodiversity specialist during three weeks in November 2009. In October 2009, the international biodiversity specialist for the Azerbaijan Analysis collaborated with a Georgian biodiversity specialist on the Georgia Biodiversity Analysis and Georgia Biodiversity Integration reports, adding continuity to the analysis in these adjacent Caucasus countries.

The Biodiversity Analysis and Biodiversity Integration Opportunities reports build on earlier biodiversity assessments for USAID in Azerbaijan. The first Azerbaijan Biodiversity Analysis was performed in 2000, and an Update was prepared in 2004. Due to the length of time between this report and the original assessment, this "update" is designed to stand alone, incorporating both background and new information.

At the time of this writing, the Azerbaijan office of USAID/Caucasus had not yet completed a new Country Assistance Strategy for years 2010 to 2015 and draft work on this document was unavailable to the biodiversity assessment team. Instead the results of this ABIO report are based on the current approved Strategy for 2006-2010, along with documentation on current and planned mission activities and consultations with USAID staff. It is expected that the relevant results of this document will be considered in the development of the new strategy.

There is nothing in the approved Strategy or the ongoing and proposed activities of USAID/Caucasus-Azerbaijan that directly addresses biodiversity. Mission activities are focused in three sectors: Economic Growth, Democracy/Governance and Health. There are, however, a few ways that biodiversity may be impacted by mission activities in these three programmatic areas. Each current Strategic Objective (SO) is briefly described below, along with a discussion of the "extent to which this meets identified biodiversity needs" and "recommendations" which suggest ways biodiversity may be incorporated within existing programmatic intentions and any threats to biodiversity that might be a factor in program planning. The following SO-targeted recommendations stem from the ABA report. Recommendations either address five Root Causes (A to E) or eight Direct Threats (1 to 8). Full details of these threats and causes are provided in Chapters 6 and 7 of the ABA document. Although a summary of these recommendations is presented in Annex A, it is suggested that readers using this report also be familiar with the contents of the ABA document.

Some of the mission's cross-cutting themes of anti-corruption, gender, Global Development Alliance (GDA), Islam, values and social capital, and youth also address some of the root causes of biodiversity loss. Any mission activities to reduce societal acceptance of corruption, under this cross-cutting theme, can expect to have positive consequences where corruption affects biodiversity policies and management in Azerbaijan. Anti-corruption measures can also help address the deeply corrupted education system that draws youths, another cross-cutting theme, into paying for special privileges at an early age. Similarly, anything to improve the wellbeing of women in rural areas, under the cross-cutting theme of gender, may also help biodiversity. Women are often those living closer to the natural resources in rural areas and the more they are incorporated into activities and programs that better them, the less reliant they are on over-extraction of biodiversity resources for survival. Finally, the mission cross-cutting theme of values and social capital that instill confidence in open markets and democracy will ultimately help in the better management of natural resources to everyone's advantage.

In addition to the USAID/Caucasus Azerbaijan office-specific and cross-cutting activities, there are opportunities for synergistic efforts with USAID/Caucasus in Georgia, particularly in watershed activities being considered for the Alazani River Basin in Georgia. These opportunities are detailed in the GBIO prepared for USAID/Caucasus. As the proposed new integrated watershed and natural resource management project in Georgia starts shaping up, people, ecosystems and biodiversity on the downstream side in Azerbaijan will benefit from these activities as well.

There are a number of political problems in Azerbaijan that make it difficult for donors to engage in biodiversity conservation projects at this time. It is important, though, to keep in mind that Azerbaijan is in the Caucasus Ecoregion, an internationally recognized biodiversity hotspot with important biodiversity resources. When possible, USAID should seek opportunities to work with the private sector to develop the economic potential of this important biodiversity. And, if the political situation improves significantly, USAID should seek opportunities to work with the government to involve civil society in the management of protected areas and in biodiversity conservation in general.

## **Strategic Objective I: Growth and Development of Competitive Private Enterprises Accelerated**

**Description of SO:** SO1 aims to help diversify the economy from its dependence on petroleum by enhancing business in small and medium sized enterprises in the non-oil sectors. Programs aim to improve economic policy and the business environment, to strengthen the financial services sector, and to improve access to economic and social infrastructure. The agricultural sector is particularly targeted for programmatic attention. Anti-corruption reform is also an important consideration under this SO.

**Extent to which this meets identified biodiversity needs:** Anti-corruption activities under this SO, although not necessarily focused in the natural resources sector, will also help address the biodiversity root cause of corruption in general. Similarly, work within any sector to enhance small and medium sized private enterprises in rural areas will also help address the root cause of rural poverty. More specifically, activities under IR 1.1.4 that aim to improve domestic energy regulation may also help address the overharvesting of fuel wood by rural residents living in poverty with no alternative fuel sources.

**Recommendations:** In particular, any efforts that help expand the provision of gas to many rural communities will directly address recommendation 2.1 from the ABA report (see Annex A). Aquaculture projects under Private Sector Competitiveness Enhancement Program of this SO need to include training and on-the-ground measures to prevent the introduction of non-native fish into natural water bodies and also to insure that antibiotics, hormones and other wastes do not contaminate surrounding areas.

## **Strategic Objective 2: More Representative, Participatory and Better Functioning Democracy**

**Description of SO:** SO2 aims to strengthen democratic processes in the country primarily by assisting independent media and civic education programs to help educate citizens, through election monitoring and training of election officials, and by strengthening civil society's capacity and financial sustainability to engage in political activities. Anti-corruption reform is also addressed specifically in this SO. Ongoing projects work to strengthen relevant legal processes, provide a corruption hotline, work to strengthen the political party system and other activities that are needed to advance democracy.

**Extent to which this meets identified biodiversity needs:** As is the case with SO1, anti-corruption activities under this SO, although not necessarily focused in the natural resources sector, will also help address the biodiversity root cause of corruption in general. To the extent that environmental NGOs are engaged in

policy and decision making capacity building activities, lack of political will, one root cause, is addressed. The Small Project Assistance program of the U.S. Peace Corps also helps address the root cause of rural poverty and community based work can also help provide people with alternative sources of income, thus lessening their reliance on unsustainable natural resource extraction.

**Recommendations:** Whenever possible, environmental NGOs should be targeted for capacity building efforts that strengthen their ability to engage in public dialogues on conservation matters. Anti-corruption programs should be sure to include areas involving the abuse of natural resources and biodiversity by those in charge of protecting it. Community level work by Peace Corps representatives should be encouraged in biodiversity rich rural areas to provide alternative sources of income and other resources for villagers that presently hunt and fish illegally and unsustainably in order to provide for the needs of their families. Activities planned or underway under this SO do not appear to pose any threats to biodiversity.

### **Strategic Objective 3: Increased Use of Quality Health Care Services and Practices**

**Description of SO:** SO3 focuses on improving the policy and legal side of the government's health care delivery system while also trying to expand health care services at the community level. Programs are directed towards AIDS/HIV, tuberculosis, malaria and other infectious diseases. Special attention is also given to female reproductive health, marginalized children, internally displaced persons and others to ensure that their health needs are met.

**Extent to which this meets identified biodiversity needs:** The health SO and activities do not directly address any biodiversity threats or root causes, although family planning education indirectly addresses unsustainable resource extraction in rural areas that result from increasing human populations.

**Recommendations:** Care needs to be taken to avoid contamination with biological waste in and around natural areas where biodiversity may be impacted. Any programs aimed at reducing malaria that involve pesticides also need strong scrutiny by USAID per 22CFR216. No other biodiversity related linkages or potential problems are noted under this SO.

# Annex A: Summary of Threats and Recommendations from the January 2010 Azerbaijan Biodiversity Analysis Report

Five root causes and eight specific threats have been singled out for attention in the Azerbaijan Biodiversity Analysis Report but the root problems run deep and the specific threats to biodiversity are many more and all pervasive. A summary of the threats and recommendations follows.

## **Root Cause A: Corruption**

A1. All activities of the Ministry of Ecology and Natural Resources (MENR) need to be opened for inspection and visible to citizens, donors and all others. Light must be shed on the hiring process, and positions need to be subject to open competition.

A2. All national parks, strict nature reserves and other protected areas need to have management plans in place that follow IUCN Protected Area guidelines. All national parks and protected areas need to be opened up for research and monitoring and well-managed tourism. Salaries of rangers and scientific staff need to be greatly increased. Experienced international specialists need to be involved in work in every protected area.

## **Root Cause B: Rural Poverty**

B1. More community-based programs are needed around protected areas and in fragile landscapes to provide the rural poor with more income-producing opportunities.

B2. Reliable gas supplies need to be provided to communities to decrease their reliance on fuel wood collection for heating and cooking

## **Root Cause C: Lack of Political Will**

C1. A new National Biodiversity Strategy and Action Plan (NBSAP) needs to be developed and approved by the Government of Azerbaijan and used in policy making and on the ground activities.

C2. Red Data Book legislation in Azerbaijan needs to be updated, improved, including listing and delisting processes, species action plans, etc. The responsibility for maintenance of Red Data Book and Red List should be removed from MENR and given to scientific organizations including the Academy of Sciences, Universities and Nature Conservation NGOs.

C3. The Environmental Impact Assessment (EIA) process in Azerbaijan needs to be more open allowing wide discussion with specialists and the public especially in the case of major habitat changes like drying of lakes, irrigation schemes, new construction projects, etc.

## **Root Cause D: Lack of Data**

D1. A National Biodiversity Monitoring and Information Management System needs to be modernized and also include new rules requiring mandatory representation by scientific organizations, including Institutes of Academy of Sciences, universities and NGO specialists with expertise in species, ecosystems, genetic resources and other relevant specialties.

D2. Scientific staff needs to be incorporated into MENR and into the protected areas and these experts need to be involved in program development and research and monitoring efforts. Data from these projects need

to be widely disseminated within and outside of the MENR to allow for its use in biodiversity and natural resources conservation efforts.

### **Root Cause E: Lack of Awareness**

E1. Public awareness and formal and informal education programs are needed to boost environmental concern among Azeris at all levels. School programs can be particularly effective due to the magnification of these efforts over time, through families, and through society as it ages.

E2. Demonstration projects are needed to show the importance of biodiversity conservation and other environmental efforts.

### **Direct Threat 1: Overgrazing**

1-1. Regulations need to be set and enforced for the use of pastures to stay within the carrying capacity of the environment. For instance, rules such as only one cow or four sheep per ha along with strong penalties for infractions will help preserve these habitats.

1-2. Strict protected areas need fencing or canals to protect the land from grazing of domestic animals. Where possible, villages should not be located on borders of protected areas. In these cases it is better to change borders of protected areas, and include buffers, so the rules are enforceable.

1-3. Alternative fodder should be provided for domestic sheep and goats that are regularly herded through fragile landscapes.

### **Direct Threat 2: Logging and Fuel Wood Harvesting**

2-1. Gas supplies should be provided to communities to decrease their reliance on fuel wood collection for heating and cooking.

2-2. Illegal commercial logging for furniture and building material needs to be addressed with strong measures such as control posts on roads, strong penalties and publication of infractions in the mass media.

2-3. More information is needed to manage legal logging operations in Azerbaijan. Special projects are needed to identify the real number of harvested trees every year, especially in the most vulnerable areas.

2-4. Where the climate and growing conditions are suitable for forest regeneration or replanting, efforts should be made to increase forest cover.

### **Direct Threat 3: Poaching and Illegal Wildlife Trade**

3-1. Corruption must be fought in this area. Programs to identify the scale of poaching, analyze reasons for each site and publicize this information are needed. There should be immediate strong controls against selling shot birds on the roads.

3-2. The prohibition against hunting, which has been on the books for four years, needs to be rescinded because it prevents the establishment of sustainable hunting regulations. Special hunting zones should be established and seasonal hunting permits should be available based on sound wildlife management practices.

3-3. A captive facility for Azerbaijan wildlife is needed that meets international zoo standards and includes captive breeding and reintroduction programs for native species.

**Direct Threat 4: Over-fishing**

4-1. Licensing laws for vessels in the Caspian Sea and laws regarding illegal fishing and fishing methods in rivers and lakes should be enforced.

4-2. Monitoring projects are needed to identify the real extent of the damage from illegal fishing and also to set better guidelines for commercial fishing operations.

**Direct Threat 5: Water Pollution**

5-1. A monitoring system for oil spills in the Caspian Sea along oil pipelines, and in terrestrial oil fields around wetlands that involves international and local experts is necessary.

5-2. Water quality standards in Azerbaijan need strengthening and infractions should be punished. A monitoring system of rivers and the coastline involving NGOs, scientists, and the mass media is needed to identify and publicize problems.

**Direct Threat 6: Infrastructure development**

6-1. Projects involving hydroelectric schemes, draining of wetlands and other human engineering programs in natural aquatic habitats need to address the conservation of aquatic biodiversity.

6-2. Fish ladders and other bypasses need to be added to existing dams in all waterways that presently block the passage of sturgeon and other fish to their spawning and nursery grounds.

6-3. Terrestrial infrastructure like disintegrating former Soviet era factories, pipelines and other infrastructure need to be removed and new infrastructure needs to meet EIA requirements.

**Direct Threat 7: Exotic species**

7-1. Monitoring efforts for invasive species need to be put in place. The extent and distribution of exotic species, particularly fish and some invasive plants, need to be determined and programs put in place to eliminate invasive exotic species and restore native species.

7-2. Reintroduction projects, restocking of rivers, planting of trees, etc. should only use native species and subspecies unless exhaustive studies demonstrate that an economically important non native species will not become invasive or interfere with the normal functioning of ecosystems.

**Direct Threat 8: Changing agricultural practices**

8-1. Loss of agrobiodiversity is not yet a major problem in Azerbaijan, and seed banks and nurseries for native plants still exist, but need more support before this loss becomes a major threat.