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Brief Description:

The USAID Georgia submits the attached FAA 119 analysis for E&E Bureau Environmental Officer approval in preparation for the development of our Country Development Cooperative Strategy (CDSC).

This analysis addresses: (1) the actions necessary in that country to conserve biological diversity; and (2) the extent to which the actions proposed for support by the Agency meet the needs thus identified (FAA, Sec. 119(d))."

The Mission requests the BEO approval for the report.

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BIODIVERSITY ANALYSIS UPDATE FOR GEORGIA: GEORGIA BIODIVERSITY INTEGRATION OPPORTUNITIES

UPDATE OF THE FINAL REPORT

May 2012

The update of the Georgia Biodiversity Integration Opportunities report was produced by USAID/Georgia team, Mariam Ubilava and Jill Kelley, pursuant to the requirements for the preparations of the USAID/Georgia Country Development Cooperation Strategy (CDCS) FY 2013-2017. The original report was prepared by ECODIT for the **Biodiversity Analyses Update for Georgia and Azerbaijan**, Task Order No. EPP-I-07-06-00010-00 in January 2010.

AUTHORITY

This update of the final report of the 2009 Biodiversity Analysis Update for Georgia dated April 2012 was prepared by the USAID/Georgia environmental team to meet the requirements of the USAID/Georgia Country Development Cooperation Strategy (CDCS) FY 2013-2017.

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

BIODIVERSITY ANALYSIS UPDATE FOR GEORGIA: GEORGIA BIODIVERSITY INTEGRATION OPPORTUNITIES

UPDATE OF FINAL REPORT - VOLUME II OF II

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" are required to inform the mission when new assistance strategies are being developed. The first Biodiversity Analysis was performed in 1999, and an Update was prepared in 2004. In October 2009 the update of the Biodiversity Analysis and Georgian Biodiversity Integration Opportunities (GBIO) report were developed. These reports were conducted by the ECODIT, by a team of one international biodiversity specialist and one Georgian biodiversity specialist during three weeks in October 2009. The Assessment was approved by the BEO in January 2010.

Since at the time of GBIO report writing, the USAID/Caucasus Mission had not yet started a new Country Development Cooperation Strategy (CDCS) for fiscal years 2013 to 2017, the results of the GBIO report were based on the Assistance Objectives (AO) under the Performance Management Plan (PMP) for FY 2010-2013, along with documentation on current and planned Mission activities and consultations with USAID staff. With a new CDCS for FY 2013-2017, USAID will continue working in the same sectors as stated in the approved PMP for Georgia for FY 2010-2013, which are Economic Growth, Democracy/Governance, Health, Energy and Environment. However, as a result of the CDCS process the Mission created new Development Objectives (DOs) reflected in this update of the GBIO report. The proposed DOs are: 1. Democratic Checks and Balances and Accountable Governance Enhanced; 2. Inclusive and Sustainable Economic Growth; and 3. Increasingly Stable, Integrated and Healthy Society.

A few current activities address identified threats to biodiversity. The Support for National Parks project is helping to build institutional capacity to manage biodiversity within protected areas. Another environmental activity, the Integrated Natural Resource Management in Watersheds, works with local municipalities and communities to raise awareness on conservation and natural resource management, including biodiversity and implements pilot interventions on a local level to address threats to natural resource management.

One new threat identified during FY 2011 is the development of the new Forest Code and Forest Leasing procedures that will divide forests by watersheds and lease to local or foreign investors for timber harvesting and so-called forest management. Additional threats that were identified in FY 2012 are: 1) the amendment of legislation on hunting that extends the season of hunting from two to six months and allows hunting on species that used to be under the country red list, such as red deer and wild (Bezoar) goat; and 2) the new amendment to the law of Georgia on Environmental Protection allows for the conclusion of agreements of unlimited duration between interested parties and the Ministry of Energy and Natural Resources of Georgia that define compensation and mitigation measures for prior environmental damage.

A number of activities in the area of democracy and governance may help address the root threats of a lack of public education and awareness and a low level of political will about biodiversity conservation matters, particularly by increasing the participation and voice of local NGOs and public in natural resource management decision-making processes. Additionally, economic growth activities addressing root poverty issues and promoting the development of small- and medium-sized enterprises may address biodiversity issues when the focus is on ecotourism and/or the development of recycling and other small community endeavors near biodiversity-rich areas. Nonetheless, biodiversity-related activities under the existing Mission strategy are still scarce.

Threats to Biodiversity in Georgia

Background

The country of Georgia has had a tumultuous history, extending even into modern days, with a war with neighboring Russia breaking out, but quickly resolved, in August 2008.

Relations with Russia have always been problematic, but from an economic and biodiversity perspective, the natural resources were well protected under Russian rule, and the economy of Georgia thrived, mainly due to the export of agricultural products to Russia. Following Georgia's independence in 1991, poverty increased rapidly, markets disappeared, infrastructure collapsed, demand for natural resources increased and biodiversity suffered. The threats to Georgia's biodiversity intensified in these early post-Soviet days, and some lasting effects on biodiversity, such as the decline in agricultural biodiversity and the decline in populations of large ungulates like Caucasian turs (*Capra spp*) are still evident.

In the past two decades, the economic and political situation has relatively improved, and biodiversity conservation is making a comeback on civil society's agenda. International conservation efforts by multilateral donors and NGOs have drawn attention to Georgia and its neighboring countries of Armenia and Azerbaijan, the Southern Caucasus eco-region, and have helped target gaps that are present in Georgia's current protected area system. A primary focus of this work has been targeted at protected areas, with a goal of preserving 20 percent of Georgia's land under various IUCN levels of protection (strict natural reserve, wilderness area, national park, natural monument, habitat management area, protected area, and protected area with sustainable use of natural resources). Despite this ambitious goal and some success, there is an underpinning of direct threats to biodiversity remaining today due to a lack of political will, institutional weaknesses, and funding issues.

Root causes of biodiversity threats

A. Reliance of poverty-stricken Georgians on the often unsustainable use of biodiversity to support their families

Georgia is the poorest country in the Caucasus region. According to WB statistics, in 2009, 25 percent of people in Georgia lived below the poverty line. The economic collapse following the Soviet reign left many people poorer than before. With no Soviet market in which to sell their fruits, wines, and crops, many rural Georgians faced poverty for the first time in their lives. In the wine region of Georgia, for instance, many of the once-thriving vineyards have been abandoned or replaced with maize and other crops for local consumption instead. In rural areas, poverty has drawn more people to the forests to collect fuel wood, fruits, mushrooms and other resources. Hunting of birds and fishing is also an issue as there are numerous cases of unsustainable use of these resources as well as the harvesting of rare and endemic animals, largely due to widespread poverty.

B. Lack of political will to promote and support biodiversity and natural resources conservation

The Government of Georgia (GoG) appears to show little concern or focus on environmental issues as a whole and even less on biodiversity-related matters. The Ministry of Environment (MoE) is one of the weakest ministries in both funding and prestige, and within it, the section concerned with biodiversity is only a low-budgeted "Division" (Biodiversity Protection Service) and not a "Department", let alone a full-fledged "Agency". The Agency for Protected Areas (APA) has a bigger budget and higher status, largely due to donor support and the GoG's expectation that ecotourism from park visitors will drive Georgia's economic development. Much of the work of this Agency is focused on the establishment of tourism infrastructure and not on the management of the biodiversity and natural resources. Likewise, the Forestry Department at the

Ministry of Energy and Natural Resources is primarily concerned with the awarding of private concessions for logging, and has few resources to assess the health or productivity of the forests involved. Environmental Impact Assessment (EIA) requirements that were strong up until 2005 have since then been relaxed by the government in order to further economic development and attract foreign investments in development projects. Last year, the Ministry of Energy and Natural Resources initiated, for the second time within the past five years, legislation on forest leasing and the new forest code. A lack of data and non-existent inventories of forested areas is likely to lead to unsustainable forest harvest and management of forest resources under new legislation. In FY 2012, again the Ministry of Energy and Natural Resources initiated an amendment to the Nature Protection and Natural Resource Use legislation. The amendment passed three hearings at the Parliament, ignoring the international conventions and agreements on public discussions and transparency.

C. Lack of good data to effectively manage natural resources and biodiversity

No biodiversity information management system exists. At all stages of investigation for this biodiversity analysis update, it was evident that even the basic facts needed to effectively manage biodiversity are nonexistent. For instance, even the MoE Forestry Department does not know what forests they manage, whether they cover 40 percent of Georgia—a number estimated back in the days of Soviet rule—or much more, or much less. They use this 40 percent number without any evidence. The Deputy Chairman of the Forest Department said they could not afford to purchase high level satellite imagery, readily available, that could solve this dilemma. As to the state of the forests, the diversity of tree species within them, their age, health, etc., is virtually unstudied. Similarly, there is no data on fish or migratory bird populations on which to effectively base harvesting quotas or seasonal limits. There is also a lack of enforcement of laws that do exist, and many hunting and fishing traditions continue on virtually unrestricted. Although there is a general notion of which species are found in which protected areas, there are very few studies to assess numbers, effective populations, biological requirements, or ecological concerns. Outside of protected areas, the knowledge about plant and animal species is further limited, with little information available on the distribution, health, or occurrence of many species.

D. Lack of public awareness and understanding of the value of biodiversity and the benefits of conserving natural resources

There is little media attention given to conservation and biodiversity, although this may be changing with new awareness campaigns being funded by donors. Currently, most Georgians dispose of their trash into makeshift garbage dumps without regard to water or natural resource values. Recycling is nearly non-existent, although there are efforts now beginning to address this niche.

Biodiversity and natural resource conservation is a new subject area for many Georgians. Few school curricula incorporate these concerns at any grade level, and fewer still non-formal environmental clubs exist to fill this gap. Television in Georgia is the primary media through which people obtain their information. Although international television channels like CNN and BBC televise many nature programs, not everyone has access to cable and satellite television, or possesses the English language skills to comprehend the material. Local Georgian television channels may broadcast international nature programs produced elsewhere about other countries, but few programs help make Georgians aware of the importance of wildlife and natural resources conservation to their own lives.

Direct threats to biodiversity

Georgia, as part of the Southern Caucasus Eco-region, is a globally-recognized biodiversity hotspot, an area where there are exceptionally high numbers of endemic and rare species that are threatened by environmental degradation, and as such, it has received considerable international conservation attention. In a process led

by the World Wildlife Fund (WWF) with technical assistance and funding from other multilateral and regional NGOs, a series of stakeholder workshops involving more than 200 scientists, conservationists and stakeholders were held throughout the region. Georgia, with the participation of 36 biologists, had a large role in the resulting recommendations. In 2006, the results of these meetings were published, entitled “An Ecoregional Conservation Plan for the Caucasus”, forming the framework for conservation activities in the region. In these workshops, the experts collectively agreed that the following were the major direct threats to biodiversity in the Southern Caucasus Ecoregion, and all of these threats were evident in varying degrees in Georgia:

- Illegal logging, fuel wood harvesting, and the unregulated timber trade
- Overgrazing
- Poaching and the illegal wildlife trade
- Over-fishing
- Infrastructure development without strategic planning
- Pollution of rivers, wetlands and marine environments

Additionally, the following problems, more specific and in some cases even more severe for Georgia, have come to light in this assessment:

- Changing agricultural practices
- Invasive exotic species

These various threats are analyzed and listed in order of priority.

1. Poaching and the illegal wildlife trade

Unsustainable hunting of bird populations is a problem in those areas of Georgia where migratory waterfowl gather in the winter. Although hunting licenses are required, few people bother to obtain them, and hunting laws are difficult to enforce. Red-listed species like the Caucasian grouse are also hunted illegally. Large migratory hawks and eagles are shot to provide food for captive sparrow hawks that are collected from the wild and used to hunt quail. This falconry tradition is long standing around the Black Sea coast, including Kolkheti National Park. The sparrow hawks themselves are released after a season of hunting, but the raptors killed to provide meat for them are being threatened. Endangered turts live in subalpine zones, and are hunted illegally, by those with the wherewithal to trophy hunt. Reportedly such hunting often occurs by those who have access to helicopters in areas where it is difficult for rangers on horseback or foot to patrol. Another wildlife issue visible in Georgia is the taking and keeping of bear cubs (*Ursus arctos*) as attractions for local restaurants and petrol stations. Generally these cubs were orphaned due to hunting, then hand-raised, only to spend their lives in small cages. Since no captive facility exists in the country to provide better conditions for these animals to prepare for release into the wild, or for any other illegally kept animals, law enforcement is ignored.

2. Pollution of rivers, wetlands and the Black Sea

In the alpine and subalpine zones, above the villages, the water is pure, drinkable and water from Artesian wells flow freely across the landscape. However, in Georgia much of the municipal and agricultural waste, including human sewage, goes directly into the rivers and then to the Black Sea or via the Mingechevari Reservoir, which acts as a settling pond wastewater, then on to Azerbaijan and the Caspian Sea. According to conversations with World Bank sanitation consultants, no functioning municipal wastewater treatment plants currently exist. Rivers running through towns are invariably polluted. Waste from Georgia’s few industries and sediment from gravel pits also contribute to river pollution. Gold-mining operations at Bolnisi, manganese mines at Chiatura and other mines also add significant heavy metal contaminants. A number of

more pollution-tolerant species of fish still live in lowland reaches of rivers and people catch them to eat, but at their own risk. Various sturgeon species from the Black Sea, which must travel up freshwater rivers to spawn, are now only found in the relatively unpolluted Rioni River—the other streams once frequented by these fish are now polluted as well. The Black Sea itself is polluted by agricultural, municipal and industrial wastes from surrounding countries, including Georgia.

3. Illegal logging, fuel wood harvesting and the timber trade

Georgia is a country endowed with large forests and proud of them. Forests in Georgia are fully owned by the state. There are no private forests in Georgia - only long-term licenses are issued for timber production and for hunting farms. In both cases, the license holder is required to submit a management plan to the state, and operations can start only after the plan is approved. The threat to biodiversity is the selective harvest of trees on large forest areas issued as concessions to private companies without adequate knowledge of what resources are being harvested. There is no certification process for timber in Georgia. Timber leaves the country on trucks that are not adequately inspected at the border crossings, with the origin of the trees unknown. There is no available data on the extent of illegal logging operations, although in 2010 and 2011 a number of government officials were arrested for illegal logging, among other charges. Without adequate monitoring and data, there is no way to quantify the extent of this threat to forests, to the ecological services provided, and to the biodiversity that exists within them. Fuel wood harvesting also occurs in areas surrounding communities that heavily rely on wood for winter heating and cooking. In a land so rich in forests, with the human population diminishing rather than growing, fuel wood harvesting and timber cutting is not considered a major problem at this time. Likewise, collection of mushrooms, fruits, nuts, and other non-timber forest products for local use is not considered a serious threat (again, no monitoring takes place to substantiate these professional judgments). The bulbs of some threatened wild plant species are collected and traded illegally in the international market for medicinal and horticultural uses, posing heightened threats to these species.

4. Over-fishing

Over-fishing is no doubt a threat in Georgia, but due to lack of data, the extent of this threat is unknown. Little conservation attention is given to fish and other aquatic resources in this country, and harvests are not monitored effectively. Endangered sturgeon is caught and appears near the coast in fish markets along the side of the road and on restaurant menus. A common practice in Georgia used to be electro-shocking of streams and other water bodies to harvest fish. This practice drastically reduced the population of fish species during the past ten years. No reliable data is available on the extent of these practices, but a number of people report its occurrence. The status of fish populations and the level of threat to these populations are unknown.

5. Exotic species

The importation of exotic fish species over the past decades for cultivation in natural and artificial ponds has threatened the diversity and integrity of native fish species. Dating from Soviet times, when non-native fish were introduced into fish farms and natural water bodies, most inland lakes in Georgia have lost most of their native fish species. In the Black Sea, the invasive jellyfish species *Mnemiopsis leidyi* has also become widely established, leading to a decline in plankton and fish larvae. As is true in most of the world, non-native plants are likely threatening natural ecosystems in some natural areas, but little data exists on this problem in Georgia.

6. Overgrazing

Although Georgia is heavily forested, there are arid lands and subalpine areas that are used for grazing by herds of sheep and goats that are moved from area to area by shepherds as the seasons change. In some

cases this grazing land coincides with the grazing habitats of turs (*Capra spp.*), Bezoar goat (*Capra aegagrus*), and other rare, endangered or endemic ungulates in Georgia. Efforts are being made to work with shepherds to delineate zones where they can graze their livestock and areas to be dedicated to wild ungulates, but there are many areas in the country where this overlap is still a problem for native species.

7. Infrastructure development

Aquatic biodiversity in Georgia may be threatened by the existing and expanding network of large hydroelectric plants that divert the flow of rivers and streams, change the characteristics of the substrate, and block access to spawning routes for native fish species. Hydroelectric projects can be designed with these issues in mind, by including fish ladders and the like, but the extent to which this will be implemented in Georgia is unclear.

Terrestrial infrastructure is not a major threat to Georgia's biodiversity. When the Soviets left Georgia, they left behind oil and gas pipelines and pumps and industrial buildings, many of which the Georgians were unable to maintain. These crumbling buildings and structures are visible everywhere, but aside from some pollution concerns they do not present an overall threat to the country's biodiversity. Environmental organizations in Georgia, Azerbaijan and Turkey have had concerns about new pipelines being installed by British Petroleum Georgia (Baku-Tbilisi-Ceihan Oil Pipeline and South Caucasus Gas Pipeline), but monitoring of ecological impact of this project shows no direct adverse effects to biodiversity and much of the damaged habitat is being rehabilitated. In the cities, where people are moving en masse, new buildings for housing and hotels are being constructed, but these are being built on already degraded land. The issue of terrestrial infrastructure development or disintegration is not considered a major threat to Georgia's biodiversity at this time, but planned projects, particularly along the Black Sea coast may cause serious problems in the future, especially in light of the weakened national EIA requirements.

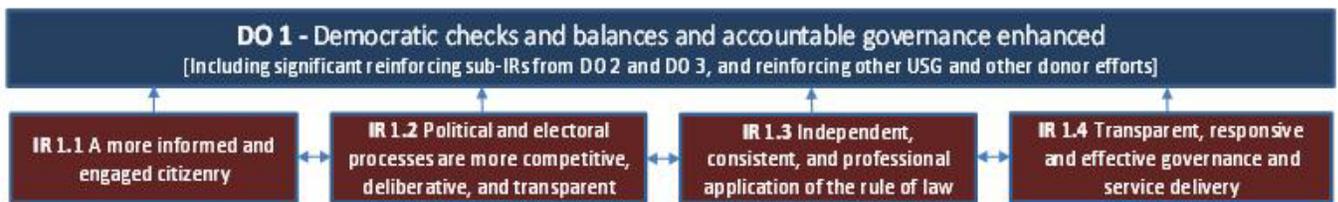
8. Changing agricultural practices

Georgia is one of the hotspots of agricultural diversity in the world, and it is thought to be the origin of many species, subspecies and stocks of many different fruit, vegetable and grain varieties. Instead of using native stocks, more "modern" seeds of which some are genetically engineered, are being imported into the country for planting. Along with this, more and more fields are becoming fallow as people move to the cities, and the remaining native agricultural varieties are being lost. Research collections and seed banks in Georgia and the region do not have the capacity or resources to save these stocks.

The Country Development Cooperation Strategy (CDCS):

Although there is no targeted biodiversity component in the Georgia CDCS, biodiversity components have a substantial overlap with the plans and activities of all Development Objectives (DO). There are also a number of ways that the GBIO findings can be considered within the plans and activities of the DOs as well. The new DOs are briefly described below, along with ways each might address biodiversity threats. The potential for negative impacts to biodiversity from the Mission's planned activities is indicated where this occurs. The implementation of the suggestions in this report can mitigate negative effects on biodiversity, amplify positive effects, and will help fill gaps in biodiversity conservation needs for Georgia.

DO-I: Democratic Checks and Balances and Accountable Governance Enhanced



Description of the DO: Programs under IR 1.1 will strengthen civil society, increase access to quality independent news sources, and enhance civic education. As a result of this IR, youth, women, and minorities will play an increased role in the governance of their communities; citizens will be better informed about the political, social, and economic issues of their country; and Civil Society Organizations (CSOs) will help citizens’ voices to be heard, having a positive impact on government policies. IR 1.2 aims to improve the processes whereby citizens make their voices heard by supporting a competitive and pluralistic political environment with stronger political parties, improved election administration, and a more capable parliament that is more open and accountable to Georgia’s citizens. These efforts will bolster checks on the executive branch and create stronger channels for conveying citizen feedback. Programs under IR 1.2 will promote the further development of Georgia’s political parties, so that they better represent their constituents’ interests; move towards professional, platform-based campaigns; and, increase the civic and political participation of underrepresented populations, including women, youth, and ethnic minorities. Programs will also improve the administration and oversight of electoral processes, decreasing the potential for post-election instability; increase parliament’s transparency; and, develop its ability to utilize citizen feedback, helping it become an independent and effective legislative body. Programs under IR 1.3 will expand access to justice. To achieve this, they will improve judicial capacity and independence, creating a more effective and objective court system, and enhance the capability of civic organizations in judicial affairs, including legal rights NGOs and the Georgian Bar Association. Potential programs under IR 1.4 will develop national and municipal administrative capacity, to help ensure government agencies follow carefully considered and evidence-based strategies that optimize resources; increase agencies’ ability to incorporate inclusive and participatory decision-making mechanisms into their planning processes, to better account for the needs of all citizens; increase e-governance and ease of access to information; and, enhance government policy formulation, regulatory functions, and service delivery, to help increase citizens’ satisfaction with the day-to-day operations of their government.

Extent to which this meets identified biodiversity needs: This DO does not directly target biodiversity threats; however, by improving public participation, strengthening civic activities and NGOs, and providing environmental media training to journalists, root causes of lack of political will to engage in biodiversity conservation activities will be addressed. Incorporation of environmental issues in civic education programs may influence the attitude of government officials and Georgian civil society toward biodiversity conservation. Creating a demand for better environmental governance will be the desired result. No threats to biodiversity are evident in the draft DO or programmatic activities.

Recommendations: Natural resources and biodiversity NGOs should be involved in capacity-building, civic education and advocacy efforts, and public-private discussions on environmental issues should be supported; efforts to strengthen the media should include environmental and biodiversity conservation thematic trainings for journalists; support should be provided with regard to raising the civil society’s environmental awareness.

DO-2: Inclusive and sustainable economic growth



Description of DO: Programs under IR 2.1 will strengthen the capacity of think tanks and professional associations, and strengthen their voice in dialogue with the GOG. Assistance will also be provided to the GOG to help with developing and implementing new laws, regulation, and policies. Economic governance includes the implementation of reforms and/or enforcement of laws that: protect property rights; facilitate commercial dispute resolution; provide predictable regulatory frameworks; promote transparent and consistent tax enforcement; and promote competition. This IR will also build the capacity of the government to formulate and implement a low emission development strategy to reduce Greenhouse Gas (GHG) trajectories while promoting long-term, sustainable economic growth. IR 2.2 will include activities designed to accelerate the development of the Georgian small- and medium-sized enterprises (SMEs), expand the manufacturing and services sector, unleash Georgia’s under-utilized agricultural potential, increase access to capital, and develop greater business acumen. Targeted sectors will include agriculture, manufacturing, services, and related value chains. Potential activities under this IR will improve the ability of Georgian firms and farms to supply products in response to the demands of the international marketplace for quality, quantity and timeliness. Activities will pursue both export-oriented and import-substitution strategies and will accelerate the adoption of appropriate scientific and technological approaches to achieve increased competitiveness. IR 2.3 will include activities to increase utilization of Georgia’s unparalleled water resource endowments, natural resources (both timber and non-timber), and conservation of ecological services so important to continued economic growth. This will require integrated watershed management which includes building communities’ capacity in sound natural resource management. Activities may support improved water-application and water-saving technologies, appropriate pricing strategies, and increased investments to refurbish irrigation systems. This IR will result in increased investments in hydro and other clean energy technologies, and improved energy efficiency in the public and private sector that, in turn, will enhance the competitive advantage of Georgian firms through lower energy costs and allow Georgia to sell green energy on global and regional energy markets. Lastly, this IR will promote greater resilience to natural disasters and address health, environmental and economic issues through better management of natural resources and waste, including recycling initiatives. IR 2.4 will strive to narrow the gap between the growing demand and currently insufficient supply of a well-educated, economically productive workforce. In basic education, activities will support the fundamentals of literacy and math, which will have a long-term impact on Georgia’s human capital. The market-driven vocational and in-service training programs and improved university teaching will enhance employability of graduates. The programs that advance university-level teaching in Georgia’s most promising sectors will underpin upgraded workforce training for immediate employment.

Extent to which this meets identified biodiversity needs: While not specifically programmed to address the actions necessary to conserve biodiversity in economic growth, this DO does address several of the root causes and direct threats to biodiversity. These are: poverty reduction; public awareness on sustainable use of natural resources; changing agricultural practices; infrastructure development; water quality in rivers and river basin; overgrazing; climate change adaptation and effective management of protected areas. These issues are covered under the current and planned USAID programs, such as Economic Prosperity Initiative (EPI), New Economic Opportunity (NEO), Integrated Natural Resource Management in Watersheds (INRMW), Climate Change Adaptation and Disaster Mitigation (CCADM) and future planned activities. While these programs are addressing, to a certain extent, the needs identified, they also pose the risk of exacerbating the issues and

threats to biodiversity, as the small scale infrastructure activities of the abovementioned projects may have a potential adverse impact on environmental and human health if the associated mitigation and monitoring measures are not properly designed and implemented. To mitigate this risk, programs will be implemented in a manner to ensure a net positive outcome is achieved while mitigating potential threats.

Recommendations: To the extent possible, biodiversity materials should be provided in educational training programs. Also, programs that ensure greater budget allocations for the education of rural students, who often live near protected areas, should also include environmental topics. The establishment of eco-clubs and eco-camps are in the scope of INRMW and CCADM activities. Also, these programs are assisting schools in developing supplementary materials on climate change and water resource management. These activities are implemented only with targeted municipalities. USAID should explore opportunities to extend this activity country-wide with the support of the Ministry of Education.

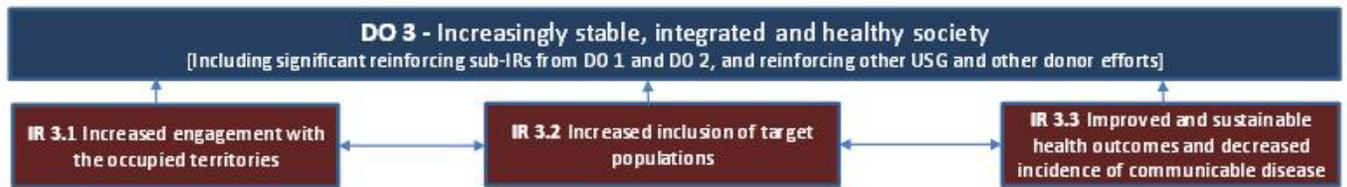
In FY 2011, USAID developed the document on pesticide use and distribution (PERSUAP). Farmers, pesticide distributors and other interested parties received training in the proper use, storage and distribution of the USA-recognized pesticides. The PERSUAP was translated into Georgian and distributed among farmers and other interested parties that are involved in pesticide use, storage and distribution. The projects having agricultural activities, EPI, INRWM and NEO should continue awareness-raising of farmers on pesticide use and distribution, and conduct updates of the document in FY 2012.

Community-based programs, such as NEO, targeting women and rural poor that often live close to endangered natural resources, could help them find better markets for their goods, develop skills and improve agricultural productivity by minimizing the pressure on, and increasing the efficient use of, the natural resource base. Development of ecotourism programs, alternative income sources, and economic infrastructure targeting these people would also help alleviate poverty and the resulting unsustainable extraction of biodiversity and natural products. To encourage the sustainable collection of non-timber forest products (mushrooms, etc.), INRWM program, in the targeted watersheds, may wish to consider supporting awareness rising activities for local communities and collectors in sustainable harvesting techniques, and developing of alternative non-extraction-based incomes that will minimize impact on natural resources and biodiversity.

Efforts to improve economic infrastructure in strategic sectors also offers possibilities for linkages when regional strategies are developed around sensitive biodiversity and protected areas (PA). Regional Development Strategies and Action Plans should consider environmental concerns, including biodiversity conservation and sustainable natural resource management topics. Currently, ongoing INRWM and Support for the National Parks programs are providing recommendations for targeted municipalities on grazing plans, protected areas and the forest management sectors. Issues related to grazing, protected areas management and forestry can be important topics to be addressed in the national economic growth strategies and regional and local economic development plans being prepared and/or updated with support from several USAID-funded projects, such as NEO, EPI and INRMW. Enhanced tourism activities and developing management plans around the areas drawing international visitors could improve the livelihoods of the poor living in PA buffer zones.

Activities aimed at improving private sector competitiveness in the agricultural sector should simultaneously be working to help preserve native varieties of fruits and crop plants and support seed banks and nurseries for native stocks to be used in plant breeding programs as well as preserving endemic ruminant livestock breeds, which would help address the loss of agro-biodiversity. Possibly a “payment for ecosystem services” type of program could compensate farmers for the economic loss of keeping some of their land for native, but often less productive or preferred, crop varieties.

DO 3: Increasingly stable, integrated, and healthy society



Description of DO: The principal results from IR 3.1 will be the development and implementation of grassroots, people-to-people, and Track II mechanisms through which communities and key actors across the Administrative Boundary Lines (ABLs) can interact and collaborate; increased opportunities for groups including civil society organizations and associations to meet and cooperate with one another; and, expanded opportunities for joint trainings and workshops for professional groups, possibly including young professionals, academics and university administrators, and journalists. Youth and professionals will develop relationships and engage around topics of common interest, such as vocational and civic education, science and technology. Collaboration on joint projects such as youth media programming may be possible. Increased dialogue and training opportunities may result in heightened professional interaction, knowledge exchange, networking and the utilization of web-based technologies and e-learning tools. Work in this area may also include support for polling and survey activities to monitor attitudes and perceptions on all sides of the Georgia conflict. This IR will contribute to Georgia's longer-term peace and reconciliation efforts. IR 3.2 will further integrate Georgia's marginalized groups, including ethnic minorities, women and girls, people with disabilities, and IDPs in political, government, private sector, and NGOs. Results under this IR will be achieved through the protection of rights; legal and regulatory reform; expanded representation of target populations in all three branches of government at national and local levels; targeted economic development opportunities; and, efforts to increase awareness and education on diversity through the media, educational institutions, and through GOG in-service training curricula and courses. Activism and advocacy on behalf of target populations will be expanded, for example, through more capable minority rights NGOs, women's business associations, and think tank policy papers on issues of disability and inclusion. IR 3.3 seeks to increase the equitable utilization of quality health services to reduce maternal and neonatal mortality, increase the use of reproductive health and family planning services, and decrease the burden of infectious diseases in Georgia. This objective will be achieved by improving health infrastructure to increase demand, increasing health promotion practices in public and private sectors and improving the use of insurance schemes to cover health care costs. Secondly, this IR seeks to build the capacity of individuals, institutions, and systems in Georgia. This will be achieved by providing training to healthcare providers to learn and adhere to evidence-based clinical guidelines, by improving access to clinical equipment, by improving management of physical facilities, and by increasing evidence-based decision-making through the development of an effective national health information system to provide timely, reliable service use and financial information needed to inform decision-making and ensure continuity of patient care.

Extent to which this meets identified biodiversity needs: This DO does not address directly any of the root causes or direct threats to biodiversity. No threats to biodiversity are evident in the draft DO or programmatic activities underway for this DO either.

Recommendations: To the extent possible, biodiversity materials should be provided in educational training programs, including Abkhazia and South Ossetia, as much as it is possible. Also, programs that ensure greater budget allocations for the education of rural and ethnic minority students, who often live near protected areas, should also include environmental topics.

Annex A: Update Summary of the Threats and Recommendations from the January 2010 Georgian Biodiversity Analysis Report

Four root causes and thirteen specific threats have been singled out for attention in the Georgian 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: Reliance of poverty-stricken Georgians on the often unsustainable use of biodiversity to support their families

A 1. More community-based programs are needed around PAs and in fragile landscapes to provide the rural poor with more income-making opportunities.

A 2. Development of ecotourism programs, alternative income sources and infrastructure targeting these people would also help alleviate poverty and the resulting unsustainable extraction of biodiversity and natural products.

A 3. Efforts to improve economic infrastructure in strategic sectors also offers possibilities for linkages when regional strategies are developed around sensitive biodiversity areas and protected areas.

A 4. Activities aimed at improving private sector competitiveness in the agricultural sector should simultaneously be working to help preserve native varieties of fruits and crop plants and support seed banks and nurseries for native stocks to be used in plant breeding programs as well as preserving endemic ruminant livestock breeds, which would help address the loss of agro-biodiversity.

Root Cause B. Lack of political will to promote and support biodiversity and natural resources conservation

B 1 . By improving public participation, awareness raising of media journalists and strengthening civic activities in NGOs related to conserving natural resources, political will to engage in such activities may also be enhanced.

B 2. Targeting environmental issues in Civic Education programs may influence the attitude of government officials towards biodiversity conservation.

B 3. Regional and Local Development Strategies and Action Plans should consider environmental concerns, including biodiversity conservation and sustainable natural resource management topics.

B 4. Government of Georgia should follow internationally recognized standards on arranging public hearings and giving a sufficient amount of time to the public, local NGOs, international organizations and donors, and technical experts to review the new laws or legal amendments before Parliament officially adopts them. The Amendment of Hunting Law and Law on Environmental Protection are examples when the GOG did not follow these standards and lacked public participation. There should be better communication between the government and civil society to ensure that public discussions are held and the feedback from NGOs and interested parties is included and considered in the final products.

Root Cause C. Lack of good data to effectively manage natural resources and biodiversity

C1. Watershed-related projects that target particular natural resources like forests, fisheries, water quality, etc., can also help in the collection and proper utilization of key data needed to manage resources.

C 3. Baseline data collection on natural resources and biodiversity should be part of assistance programs focusing on preparation of Regional and Local Development Strategies and Action Plans.

C4. Inventory and data collection of forest resources must be a key pre-requisite before government will lease forest parcels to investors for 49 years. USAID will continue working with the Government of Georgia, the Ministry of Energy and Natural Resources on revising the forest legislation and participate in the public hearings. The USAID EE office will continue providing recommendations on the draft policy. Involving civil society will be an important aspect during the public discussion of the legislation.

Root Cause D. Lack of public awareness and understanding of the value of biodiversity and the benefits of conserving natural resources

D 1. Natural resources and biodiversity NGOs should be involved in capacity-building and civic education programs, and public private discussions, while efforts to strengthen the media should include environmental awareness programs for the public.

D 2. To the extent possible, biodiversity educational materials should be provided in educational training programs. In addition, programs that ensure greater budget allocations for the education of rural students, who often live near protected areas, should also include environmental topics.