

The Biodiversity Finance Initiative (BIOFIN) – Georgia



THE FINANCIAL NEEDS ASSESSMENT

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EXECUTIVE SUMMARY

National Biodiversity Strategy and Action ("NBSAP") is a public document, which should serve as a policy implementation instrument to ensure adequate protection and sustainability of biodiversity in Georgia. However, it was revealed that the document lacks sufficient clarity necessary to serve its purpose. For this reason, it is challenging for the government to implement those actions, as they lack the cost-estimates and prioritization. Moreover, NBSAP Georgia, does not cover several important areas of economic activity, having a significant impact on biodiversity such as mining and hydro energy sector. Current NBSAP also does not clearly outline the financial needs of the activities which are currently covered but future financing is not secured. These limitations significantly affect the implementation of the document.

The Biodiversity Finance Needs Assessment ("FNA") study revealed and calculated the total amount of funding required to sustain and protect biodiversity in Georgia. FNA covered not only NBSAP, but other areas which have a significant effect on biodiversity and ecosystem services. In addition, during the course of the study, NBSAP activities were prioritized based on urgency and the scale of overall impact. Prioritization coupled with the cost-estimation by different activities enables policy makers to focus on the most critical items.

Estimated funding needs were compared with the financing provided by different sources, such as public sector, international donors and private sector. The findings outlined in the Biodiversity Expenditure Review ("BER") were used as an input in the overall analysis to estimate the biodiversity funding gap.

Based on the results of FNA, biodiversity protection needs in Georgia were attributed to different areas in the following way:

- Total biodiversity financing needs over the 10-year period 2013-2022 amounted to USD 390 million;
- 47% of the total, or USD 208 million, was attributed to existing biodiversity related government programs, and government capacity improvement;
- 26%, or USD 97 million, was attributed to NBSAP financing;
- 22%, or USD 81 million, was attributed to two developing economic sectors – Hydro Power Plants ("HPPs") and Mining;
- 1.3%, or USD 5 million, was attributed to donor biodiversity projects not covered by NBSAP.

After comparing the needs to available financing, the gap was calculated. Total financing gap amounted to USD 135 million over the five-year period 2018-2022. Estimated 38% of the gap was attributed to anticipated insufficient funding of NBSAP actions, 43% was connected to inadequate spending by Hydro Power Plant and Mining sectors, while the remaining 19% was related to capacity building needs for MENRP. On average, Georgia needs to increase its biodiversity spending by USD 27 million per year in the period of 2018-2022. Compared to GDP, this amounts to only 0.2%, while compared to Georgia's government budget, it is about 0.6%. It should be noted, that not all the increased spending should come from the government budget. It is estimated that about USD 15 million per year should be spent by the government of Georgia in addition to existing spending to finance all the related biodiversity activities in the following 5 years, which is only 0.3% of the government budget.

Part of the gap should be financed by private companies in sectors such as mining and hydro power. The spending should increase their efforts to eliminate the effects of their operations on the surrounding nature. The spending which should come from such sources is on average USD

12 million per year for the next 5 years, which is about 2% of the share of these sectors in Georgia's GDP.

The analysis of the revealed data outlined several areas of potential improvement, which could significantly increase funding flow towards biodiversity:

- It was revealed that public sector spending has the dominant share in existing biodiversity financing. This indicates the need to concentrate the efforts on increasing funding, first of all, from the public sector, as it would be relatively small change in existing financing flows. The goal could be best achieved by creating improved justification of the need to fund state programs related to biodiversity. Such justification should demonstrate the alignment of the goals of biodiversity to the overall needs and plans of the government and can be used to form the opinion of both policy makers and general public alike;
- The lack of clear and concise biodiversity protection

- vision influences the effective distribution of available funds and hinders the attraction of new financing. One of the main recommendations outlined in the report concerns the creation of an effective and consequential vision based on existing biodiversity priorities. Unified vision could be used to attract funding from public, donor and private sectors more effectively;
- The report outlines the need for improved regulation of HPP and Mining sectors by analyzing the significant gap in state regulation of the mentioned sectors and the compliance (or the lack thereof) by sector players;
- Other important findings stress the need for the creation of mechanisms allowing private sector companies and individuals to participate in biodiversity related programs more actively via voluntary donations or other types of financial support.
- Finally, the significant potential and the importance of own revenue generation by MENRP agencies is outlined in relation to financing the need for MENRP capacity building.

LIST OF ACRONYMS

APA Agency of Protected Areas

BBOP Business and Biodiversity Offsets Programme

BER Biodiversity Expenditure Review
BIOFIN The Biodiversity Finance Initiative
CBD Convention on Biological Diversity
CBO Community Based Organisation
CDM Clean Development Mechanism

CNF Caucasus Nature Fund

DES Department of Environmental Supervision

EIA Environmental Impact Assessment

ELL Environmental Liability Law

EU European Union

FNA Financial Needs Assessment

GCF Green Climate Fund
GDP Gross Domestic Product
GEF Global Environment Facility

GiZ Deutsche Gesellschaft für Internationale Zusammenarbeit

GNTA Georgian National Tourism Agency

HPP Hyro-electric Power Plant

IFI International Financial Institution

IUCN International Union for the Conservation of Nature

MENRP Ministry of Environment and Natural Resources Protection of Georgia

MEPA Ministry of Environmental Protection and Agriculture
MESD Ministry of Economy and Sustainable Development

MoE Ministry of Energy
MoF Ministry of Finance

NBSAP National Biodiversity Strategy and Action Plan

NEA National environmental Agency
NFA National Forestry Agency
NGO Non-governmental Organisation

NTFP Non-timber Forest Product

PA Protected Area

SDGs Sustainable Development Goals
SEA Strategic Environmental Assessment

TEEB The Economics of Ecosystems and Biodiversity
UNDP United Nations Development Programme

UNFCC United Nations Framework Convention on Climate Change

WWF World Wide Fund for Nature

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1. INTRODUCTION

The Caucasus is considered by international organizations as one of the distinguished regions of the world in respect of biodiversity. It is within one of WWF's 35 "priority places" (the greater Black Sea basin) and is also part of two of 34 "biodiversity hotspots" (the Caucasus and Iran-Anatolian hotspots) identified by Conservation International as being simultaneously the richest and most threatened reservoirs of plant and animal life.

Georgia is rich in various types of ecosystems, habitats and associated species, including those that are used or are potentially important as food or other essential products.

Since the collapse of the Soviet Union, Georgia has been trying to recover its economy and increase the wellbeing of its socially vulnerable population. Although the economy has been increasing gradually for the past two decades, socio-economic concerns are among the top priorities of the population and subsequently, the government of Georgia.

The goals of economic development oftentimes overshadowed the need to preserve biodiversity and

ecologic systems, which led to unsustainable practices, such as lack of sufficient regulation in sectors such as mining and energy generation, overgrazing through animal husbandry, unsustainable use of forest resources, etc.

Despite the increase in the size of the government budget, biodiversity has been largely neglected and was not prioritized accordingly. This is evidenced by an insignificant share of less than a half percent (0.3%) of financing allocated to the Ministry of Environment and Natural Resources Protection compared to the total government budget.

Despite the fact that Georgia became member of CBD convention in 1994 and created its first National Biodiversity Strategy and Action Plan, the finances allocated to the sector did not increase significantly. NBSAP document lacked strategic vision and represented more a collection of actions which needed to be undertaken, than a streamlined and specific action plan, presenting clear stages and priorities. NBSAP lacked the cost-estimates for necessary funding and clear sequence of actions, with relevant presentation of effects on biodiversity and the long-term well-being of Georgia's population.

1.1 Aims and Objectives

The FNA aims to make a comprehensive estimate of the financial resources needed to achieve national and sub-national biodiversity targets (NBSAP and other key national strategies). It compares these financial needs to

expected biodiversity expenditures over a medium- to long-term planning horizon.

The objectives of the FNA are to:

- Review and integrate the FNA with the national planning and budgeting process for optimal impact.
- Clarify strategies and actions in national biodiversity plans (NBSAPs) to describe "costable actions" that link to expected biodiversity results in a logical framework that lends itself to costing.
- Produce a detailed budget for each costable action by defining unit costs and quantities over the target time frame.
- Use these detailed budgets to make a stronger case for biodiversity finance – linking the costs of achieving specific results to the national budget processes.
- Prioritize biodiversity strategies and actions based on specific biodiversity and cost criteria.
- Link the FNA to the Biodiversity Expenditure Review (BER) through a tagging system that associates financing needs with expenditure categories, sectors, and organizations.
- Calculate the finance gap between business as usual biodiversity expenditure projections (from the BER)

and financial needs identified in the FNA in as detailed a manner as possible.

the FNA methodology seeks to produce a detailed and realistic costing of the targets in national biodiversity-related action plans (i.e. NBSAPs). This approach is meant to answer the question of "what financing is really needed for the country to achieve its stated biodiversity targets?"

A budget based on estimating the full set of human resources, capital investments and financial resources needed.

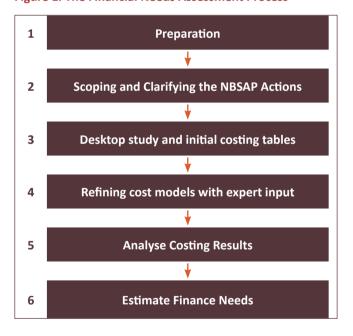
This has especially been the case traditionally with NBSAPs – most of which never included detailed budgets at all, and as a result, finance for NBSAPs was rarely adequate. The CBD has encouraged countries to apply an FNA type approach to develop a detailed and realistic budget for their NBSAPs for precisely this reason.

2. METHODOLOGY

2.1 The FNA Process

This Financial Needs Assessment (FNA) was developed according to the methodology described in the 2016 Biodiversity Finance Initiative (BIOFIN) Workbook. The Financial Needs Assessment process is outlined in Figure 1 below:

Figure 1. The Financial Needs Assessment Process



This is so that finance needs can be assessed at a level of detail that allows:

- Finance sources and solutions to be developed to address them;
- Subsequent assessments of cost effectiveness, and
- Understanding of the scale and timing of biodiversity actions.

The FNA was built on and is compatible with the national planning and budgeting practices and approaches that have been identified in the PIR. The process also relied on the analysis of the NBSAP and other strategic documents identified in the PIR.

The FNA helps to define and apply the system used for tagging expenditures in the BER to enable detailed and consistent analysis. A sound process for estimating biodiversity finance needs, allowing comparisons of specific finance needs with expenditures, can guide the selection, development and implementation of sound finance mechanisms or solutions that will be prioritized for development in the BFP.

2.2 Main needs of biodiversity funding

- Based on interviews and research conducted during the PIR and BER stages of the BIOFIN project, main areas of biodiversity financing needs in Georgia have been identified. Several documents/areas were marked as to encompass the majority of biodiversity finance needs, based on their nature, content and impact biodiversity. These documents/areas were used to create a list of costable actions for the purposes of calculating overall value of biodiversity finance needs. Following are the main categories of identified actions, based on their origin:
- National Biodiversity Strategic Action Plan ("NBSAP 2") actions:
- Programs financed by the Government of Georgia ("GoG Programs");
- Hydro Power Plant ("HPP") sector Environmental Impact Assessment ("EIA") mitigating actions;
- Mining Sector Spending environmental effect mitigating requirements;
- Actions related to Ministry of Environment and Natural Resources Protection ("MENRP") capacity expansion.

2.3 NBSAP 2 actions

The main public strategic document related to the protection and strengthening of biodiversity in Georgia is National Biodiversity Strategic Action Plan, ratified by the GoG as an official plan to achieve sustainability of biodiversity. The document describes specific actions, which were selected by the leading Georgian experts in different fields of biodiversity protection. Actions were designed for the period of 2014-2020.

NBSAP was selected as the basis for Finance Needs Assessment in Georgia. Although the document contained the descriptions of envisaged actions, in many cases the descriptions lacked sufficient clarity as to enable accurate costing of their implementation. For the purposes of clarifying the intended actions and subsequently costing them, a number of workshops had been held with the authors of NBSAP. Individual workshops were organized based on different thematic areas, where relevant experts were invited to express their opinion regarding the extent of actions and the price of their implementation. For each action, experts were asked to approximate the amount of work to be done based on transparent

calculations. Calculations included items such as (1) number of local experts needed to complete the action, (2) number of working days for local experts, (3) number of international experts needed, (4) number of working days for international experts, (5) number of workshops to be conducted, (6) number of field trips needed, (7) number of training days required, etc.

The results of these workshops were aggregated into a unified table, detailing the calculations for the cost of each action. At the same time, the cross check with BER was conducted, as for each action, experts were asked to identify the existing/planned projects related to the completion of the action in question. Experts were asked to approximate the amounts already spent for implementation of actions and the amounts allocated for future spending. For each action, a financing gap was calculated based on the required funding versus funding already spent and allocated.

Upon the completion of all required individual technical workshops, a unified consultation workshop was held,

where all of the experts along with the representatives of the MENRP were invited together on a two-day workshop. During the unified workshop, all the participants were presented with the aggregate and individual results of previous workshops, to provide comments and suggest changes if necessary. During the unified workshop, participants were asked to rank the importance of NBSAP actions based on overall urgency and effect on biodiversity.

2.4 Programs financed by the Government of Georgia

- As a result of detailed costing of NBSAP actions and individual/unified workshop(s), it was noted that actions described in NBSAP were mainly related to one-time projects aimed at improvement/investment into biodiversity protection. Actions which were already financed by the GoG budget were not adequately represented in the NBSAP and thus needed to be taken into account to create the complete picture of biodiversity finance needs. Therefore, one of the main components accounted for in the FNA results were the programs currently funded by the government. The related programs were identified based on researched conducted during BER. Such programs include:
 - Environmental policy elaboration, regulation and management

- Ensuring EIA expertise
- Environmental Awareness Measures
- Environmental Supervision
- Funding of the Agency of Protected Areas
- Funding of National Environmental Agency
- Funding of National Forest Agency
- Etc.

Relevant interviews were conducted with the MENRP and Ministry of Finance ("MoF") representatives to assess the planned future spending on the existing/planned biodiversity related programs. A medium term budget was received and modified based on responses from MoF and MENRP representatives.

2.5 Hydro Power Plant ("HPP") sector Environmental Impact Assessment ("EIA") mitigating actions

Based on discussions with relevant experts during NBSAP costing, it was concluded that NBSAP did not

adequately cover the measures required to mitigate the harmful effect of HPP sector development. Due to

significant impact of sector operations on biodiversity and planned vast expansion of HPP operations in Georgia, one of the main components of FNA were the actions required to neutralize the effects of sector development. Due to limited expertise and know-how on required measures to regulate HPP sector in Georgia, current Georgian legislation was used as a basis for the estimation of required funds. Currently, HPP sector is regulated via EIA requirements, which contain mitigation measures created and agreed with MENRP. The research conducted during the BER stage was used to approximate the cost of actions specified by EIAs to be undertaken by relevant actors, both existing and new, in HPP field. Based on the fact that EIA inspections detect incomplete fulfillment of EIA requirements, it was assumed that the

existing completion rates of EIA mitigation measures would continue in the future, which was used as a basis for calculating future spending in HPP sector vs total spending need.

It must be noted that the calculation of HPP required spending on biodiversity is based on existing EIA legislation, which as noted by relevant experts, is significantly less strict compared to similar documents in developed countries. Therefore, funding gaps or needs identified using this approach, represent a conservative estimate. Should the calculations be made on the basis of requirements set forth by the EIA of developed countries, the financing needs and gap would be significantly higher.

2.6 Mining Sector Spending environmental effect mitigating requirements

Similar to the HPP sector, mining sector was not adequately covered by the actions specified under NBSAP. This was due to the absence of relevant expertise in the NGO sector related to the control of mining activities. The only relevant government regulations of the mining sector in respect of biodiversity protection were the terms and conditions of mining licenses. These terms specified that the only requirement for mining operations was the remediation of soil after the mining operations were completed. The

remedial cost was roughly and conservatively estimated based on the price of license, which served as a proxy for determining the extent and size of mining operations. It must be noted that since the FNA assessment completion, the mining sector was subjected to EIA requirements based on legislative changes adopted by the GoG. The effects of such change were not assessed due to the short time since legislative change took place and subsequent lack of historical information.

2.7 Actions related to Ministry of Environment and Natural Resources Protection capacity expansion

Aside from the programs already being implemented by the GoG as part of the state budget, MENRP representatives outlined a number of requirements to expand the capacity of the ministry staff. These requirements included (1) the need for increased salaries to retain and attract qualified personnel, (2) the need for equipment (3) additional staff to effectively control processes and implement programs, (4) trainings of existing staff to increase productivity.

In order to account for the mentioned needs in FNA estimates, interviews were conducted with representatives of relevant departments in MENRP. Representatives were asked to determine their requirements and justify the needs. Based on the results of the interviews, the suggested amounts were added to the overall biodiversity finance needs estimate.

3. RESULTS

The results summarize the financing needs estimated form different sources such as NBSAP, mining and HPP regulations, existing government budget programs and personal interviews with ministry representatives. Each area is analyzed in a separate section.

In order to present the results, biodiversity finance needs are analyzed for the period of 10 years, which is split into two 5-year periods for presentation purposes:

- Past five-year period (2013-2017)

- Future five-year period (2018-2022)

Biodiversity Expenditure Review (BER) covers the same time periods. Actual expenditures for the past five years are analyzed and expenditures budgeted for the next 5-year period are estimated.

The comparison of the needs and available funding provide with an estimate of a gap in financing for different expenditure categories.

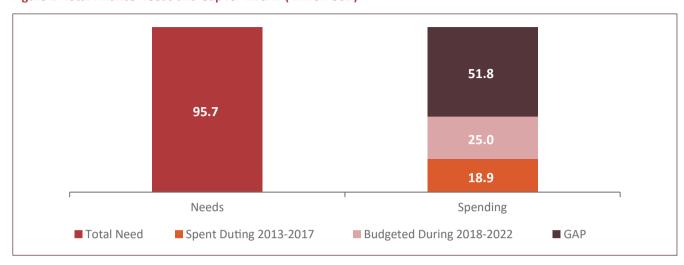
3.1 NBSAP 2 actions

Based on the analysis of the data gathered through workshops with key biodiversity experts in Georgia, it was estimated that the total funds required to finance all of the actions in NBSAP amounted to USD 95.7 million.

Past five years (2013-2017) have indicated a spending of USD 18.9 million, while additional USD 25 million were budgeted and allocated for the next five-year period. The gap therefore amounted to USD 51.8 million, or about 54% of the total need. It must be noted that NBSAP was created

with a target to be completed by 2020. The additional two years were estimated for certain actions, which were not one time projects, but continuous processes. Therefore, it can be expected that when 2020 is reached, new NBSAP would add more actions to already existing and unfunded actions. The Figure 2 below indicates the total need estimated for NBSAP completion, amounts already spent and budgeted for the following five years. The gap is calculated as the difference between the amounts:

Figure 2. Total Finance Needs and Gap for NBSAP (million USD)



The needs of financing and subsequent gap was analyzed by thematic groups. Based on results, it can be outlined that the Forest thematic area, which occupied the highest portion of the total spending need (USD 35.3 million) was financed the most and the gap for the thematic area amounted only to USD 6.0 million, or about 17% of the total amount required.

Agrobiodiversity, which was the second largest contributor to the total financing need (USD 20.9 million) was one of the least financed thematic areas with the gap in financing of USD 18.3 million, or 88% of the total need. The summary table 1 by thematic areas is presented below:

Table 1. Finance Needs and Gap by thematic areas

FNA (USD)	Value of action	Spent	Remaining amount to spend	(Among them) Already allocated (Amount)	GAP	GAP as % of total needs
NBSAP Total	95,650,535	18,894,600	76,755,934	24,972,497	51,783,437	54%
Forest	35,330,482	8,845,551	26,484,931	20,462,760	6,022,171	17%
Agrobiodiversity	20,952,445	2,329,835	18,622,610	286,904	18,335,706	88%
Species and Habitats	17,812,148	2,358,836	15,453,312	1,875,724	13,577,588	76%
Protected Areas	7,489,074	2,081,418	5,407,655	1,679,655	3,728,000	50%
Awareness	4,498,873	2,433,732	2,065,141	41,193	2,023,948	45%
Black Sea	4,525,924	107,559	4,418,365	49,000	4,369,365	97%
Inland Waters	2,897,237	365,198	2,532,038	177,753	2,354,285	81%
Cross-cutting	1,149,298	206,296	943,002	108,215	834,788	73%
Biosafety	995,054	166,174	828,880	291,293	537,588	54%

The gap was further analyzed by priorities: the actions were split in three categories numbered from 1 to 3, 1 being the most important item and 3 being the least

important or urgent matter. The table 2 below shows the breakdown for priority 1:

Table 2. Finance Needs and Gap breakdown for NBSAP priority 1

FNA (priority 1) (USD)	Value of action	Spent	Remaining amount to spend	(Among them) Already allocated (Amount)	GAP	GAP as % of total needs
NBSAP Total	45,172,743	13,185,486	31,987,257	13,766,293	18,220,964	40%
Forest	22,014,364	8,669,764	13,344,600	10,811,804	2,532,796	12%
Agrobiodiversity	852,576	264,951	587,625	0	587,625	69%
Species and Habitats	13,716,133	2,048,399	11,667,734	1,329,834	10,337,900	75%
Protected Areas	4,319,419	1,679,389	2,640,030	1,624,655	1,015,375	24%
Awareness	1,453,736	506,911	946,825	0	946,825	65%
Black Sea	2,255,890	16,072	2,239,818	0	2,239,818	99%
Inland Waters	148,125	0	148,125	0	148,125	100%
Cross-cutting	412,500	0	412,500	0	412,500	100%

Forest is the largest category and is financed the most. Species and habitat is the second largest category.

Financing for this group however is relatively weak. The table 3 below shows the breakdown for priority 2:

Table 3. Finance Needs and Gap breakdown for NBSAP priority 2

FNA (priority 2) (USD)	Value of action	Spent	Remaining amount to spend	(Among them) Already allocated (Amount)	GAP	GAP as % of total needs
NBSAP Total	30,699,271	3,419,428	27,279,843	10,783,179	16,496,664	54%
Forest	13,316,118	175,787	13,140,331	9,650,956	3,489,375	26%
Agrobiodiversity	2,730,875	131,825	2,599,050	0	2,599,050	95%
Species and Habitat	3,278,203	310,438	2,967,765	545,890	2,421,875	74%
Protected Areas	3,132,154	402,029	2,730,125	55,000	2,675,125	85%
Awareness	2,531,074	1,758,526	772,548	0	772,548	31%
Black Sea	2,181,081	91,487	2,089,594	49,000	2,040,594	94%

FNA (priority 2) (USD)	Value of action	Spent	Remaining amount to spend	(Among them) Already allocated (Amount)	GAP	GAP as % of total needs
Inland Waters	2,686,487	365,198	2,321,288	177,753	2,143,535	80%
Cross-cutting	438,186	128,930	309,256	13,287	295,969	68%
Biosafety	405,094	55,207	349,886	291,293	58,594	14%

The table 4 below shows the breakdown for priority 3:

Table 4. Finance Needs and Gap breakdown for NBSAP priority 3

FNA (priority 3) (USD)	Value of action	Spent	Remaining amount to spend	(Among them) Already allocated (Amount)	GAP	GAP as % of total needs
NBSAP Total	19,778,521	2,289,686	17,488,835	423,025	17,065,810	86%
Agrobiodiversity	17,368,994	1,933,059	15,435,935	286,904	15,149,031	87%
Species and Habitat	817,813	0	817,813	0	817,813	100%
Protected Areas	37,500	0	37,500	0	37,500	100%
Awareness	514,063	168,295	345,768	41,193	304,575	59%
Black Sea	88,953	0	88,953	0	88,953	100%
Inland Waters	62,625	0	62,625	0	62,625	100%
Cross-cutting	298,612	77,365	221,247	94,928	126,319	42%
Biosafety	589,960	110,967	478,994	0	478,994	81%

The table 5 below shows the breakdown of GAP by BIOFIN categories:

Table 5. NBSAP Finance Needs and Gap breakdown by BIOFIN categories

BIOFIN category (USD)	Finance Needs (10 years)	Spent (2013-2017)	Allocated (2018-2022)	GAP
NBSAP Total	96,950,742	20,068,852	25,083,453	51,798,437
Access and benefit sharing	163,727	14,852	0	148,875
Biodiversity and development planning	4,302,119	2,362,554	215,928	1,723,638
Biodiversity awareness and knowledge	6,347,071	1,447,168	54,480	4,845,423

BIOFIN category (USD)	Finance Needs (10 years)	Spent (2013-2017)	Allocated (2018-2022)	GAP
Biosafety	1,565,734	211,479	291,293	1,062,963
Green economy	321,413	0	0	321,413
Pollution management	1,184,647	70,272	0	1,114,375
Protected areas and other conservation measures	30,073,744	2,770,880	11,846,489	15,456,375
Restoration	15,701,132	1,097,429	358,890	14,244,813
Sustainable use	37,291,154	12,094,217	12,316,373	12,880,564

Table 6 below provides a breakdown of NBSAP financing GAP by Aichi targets:

Table 6. NBSAP Finance Needs and Gap breakdown by Aichi targets

Aichi target (USD)	Total Finance Need (2013-2022)	Spent (2013-2017)	Allocated (2018-2022)	GAP
NBSAP total	96,950,742	20,068,852	25,083,453	51,798,437
Target 1: Awareness increased	3,316,354	1,045,238	41,193	2,229,923
Target 2: Biodiversity values integrated	3,175,601	454,939	13,287	2,707,375
Target 3: Incentives reformed	40,313	0	0	40,313
Target 4: Sustainable production and consumption	983,305	72,830	485,000	425,475
Target 5: Habitat loss halved or reduced	23,114,326	8,728,389	11,183,000	3,202,938
Target 6: Sustainable management of marine living resources	6,233,539	66,487	24,000	6,143,052
Target 7: Sustainable agriculture, aquaculture and forestry	4,133,583	1,115,059	212,353	2,806,171
Target 8: Pollution reduced	3,139,375	2,111,452	412,020	615,904
Target 9: Invasive alien species prevented and controlled	1,563,459	211,479	291,293	1,060,688
Target 11: Protected areas increased and improved	22,096,857	2,110,973	11,810,197	8,175,688
Target 12: Extinction prevented	8,058,536	1,737,353	395,183	5,926,000
Target 13: Genetic diversity maintained	3,958,984	19,984	0	3,939,000
Target 14: Ecosystems and essential services safeguarded	11,660,500	0	0	11,660,500

Aichi target (USD)	Total Finance Need (2013-2022)	Spent (2013-2017)	Allocated (2018-2022)	GAP
Target 15: Ecosystems restored and resilience enhanced	1,147,147	70,272	0	1,076,875
Target 16: (ABS) Nagoya Protocol in force and operational	166,002	14,852	0	151,150
Target 17: NBSAPs adopted as policy instrument	136,538	136,538	0	0
Target 18: Traditional knowledge respected	314,029	19,029	55,000	240,000
Target 19: Knowledge improved, shared and applied	3,712,293	2,153,978	160,928	1,397,388

Non-NBSAP spending

It is notable, that despite the lack of funds, to finance the actions specified in NBSAP, BER and FNA analysis have shown that in the past five years, an estimated USD 4.4 million was spent by the donors on actions and biodiversity projects which were not part of NBSAP proposed list of activities. The amount represents about 20% of overall spending on NBSAP actions in the same period. The insufficient alignment of donor spending with stated government objectives indicates possibility of inefficiency in communication and formation of state priorities.

3.2 Programs financed by the Government of Georgia

Programs financed by the GoG budget were included into the analysis to capture the whole extent of finance needs and financing that is actually provided. The gap in government budget spending was assessed as the financing needed for additional employees, equipment and training. Gap also included the estimate for the need for increased salaries, as the representatives of MENRP have indicated the loss of qualified personnel to the private sector due to very low salaries of ministry employees.

The total finance need for existing government programs was calculated as USD 208.4 million. USD 85.1 million

was spent in the previous five years, while additional USD 98.2 million is expected to be spent in the next 5 years.

The gap amounts to USD 25.2 million. The gap consisted of USD 23.3. million on increased salaries and new employees (USD 4.7 million per year), equipment of USD 771 thousand (about USD 154 thousand per year for the next five years) and trainings of USD 1.14 million (USD 230 thousand per year). The table 7 below presents the breakdown of the gap calculation for MENRP capacity increase:

Table 7. Finance Gap breakdown for MENRP capacity increase

Department	Salaries (USD)	Equipment (USD)	Training (USD)	Total (USD)
Biodiversity and Forestry Policy department	624,000	6,250	48,000	678,250
DES	12,360,000	330,725	144,000	12,834,725
APA	6,395,136	241,300	661,500	7,297,936
NFA	3,910,287	192,758	284,500	4,387,545
Total	23,289,423	771,033	1,138,000	25,198,456

The Figure 3 below indicates the breakdown of the need, spending and subsequent gap for government programs:

Figure 3. Total Finance Needs and Gap for government programs (million USD)



Table 8 below outlines the breakdown of government biodiversity related programs by BIOFIN categories:

Table 8. Finance Needs and Gap breakdown of government biodiversity related programs by BIOFIN categories

Row Labels (USD)	Total Finance Need (2013-2022)	Spent (2013-2017)	Allocated (2018-2022)	GAP
Total GoG biodiversity related programs	208,446,584	85,070,108	98,178,020	25,198,456
Biodiversity and development planning	5,592,172	2,490,003	2,423,919	678,250
Biodiversity awareness and knowledge	4,606,536	3,032,340	1,574,196	0

Row Labels (USD)	Total Finance Need (2013-2022)	Spent (2013-2017)	Allocated (2018-2022)	GAP
Green economy	29,187	9,527	19,661	0
Pollution management	24,889,058	12,400,898	12,488,160	0
Protected areas and other conservation measures	52,410,438	22,796,783	22,315,719	7,297,936
Restoration	7,784,295	3,383,649	4,400,646	0
Sustainable use	113,134,898	40,956,908	54,955,720	17,222,270

Table 9 below outlines the breakdown of government biodiversity related programs by Aichi targets:

Table 9. Finance Needs and Gap breakdown of government biodiversity related programs by Aichi targets

Aichi targets (USD)	Total Finance Need (2013-2022)	Spent (2013-2017)	Allocated (2018-2022)	GAP
Total GoG biodiversity related programs	208,446,584	85,070,108	98,178,020	25,198,456
Target 1: Awareness increased	4,606,536	3,032,340	1,574,196	0
Target 3: Incentives reformed	29,187	9,527	19,661	0
Target 4: Sustainable production and consumption	4,913,922	2,490,003	2,423,919	0
Target 5: Habitat loss halved or reduced	70,132,540	28,774,640	41,357,900	0
Target 7: Sustainable agriculture, aquaculture and forestry	5,859,996	803,873	668,578	4,387,545
Target 8: Pollution reduced	24,889,058	12,400,898	12,488,160	0
Target 11: Protected areas increased and improved	49,339,583	20,912,408	21,129,239	7,297,936
Target 12: Extinction prevented	6,095,171	2,719,773	3,375,398	0
Target 13: Genetic diversity maintained	27,586,369	13,074,621	13,833,497	678,250
Target 14: Ecosystems and essential services safeguarded	14,994,223	852,026	1,307,472	12,834,725

3.3 HPP sector

The total need for biodiversity financing estimated for existing and planned Hydro Power Plants for the ten-year period was estimated at about USD 55.2 million. USD 6.2 million, or about 11.2%, was spent in the previous five years. Another USD 17.1 million, or about 31.1% of the total, can be expected to be spent in the next five years. This leaves about USD 31.8 million as the spending gap, which amounts to 57.7% of the total need.

This result is further aggravated by the fact that

requirements set out in Georgian EIA, which was used as the basis for calculations, are much less strict than the requirements set out by the similar documents in developing countries.

Figure 4 below outlines the potential hydro-power plant locations throughout Georgia. Red dots indicate spots with cheap energy generation potential. Blue dots indicate locations where HPP can potentially be built albeit with higher cost estimates:

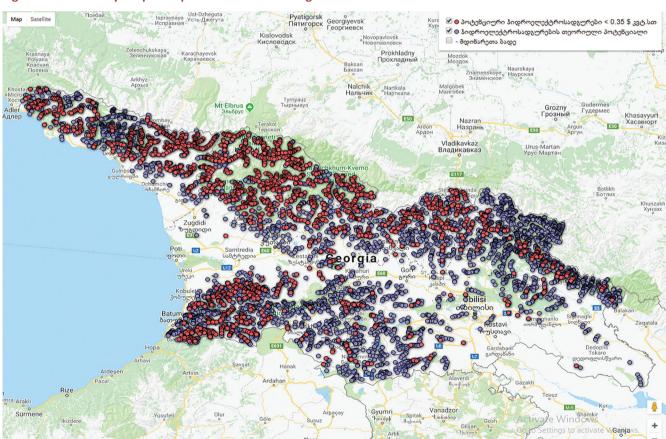


Figure 4. Potential hydro-power plant locations in Georgia

Source: Ministry of Energy of Georgia

The abovementioned map was targeting potential investors on the ministry's web-page. Given the high potential for sector development, it is crucial that biodiversity and environment protection measures are adequate to offset potential negative externalities of expansion.

The Figure 5 below presents the need and subsequent gap in the HPP sector:

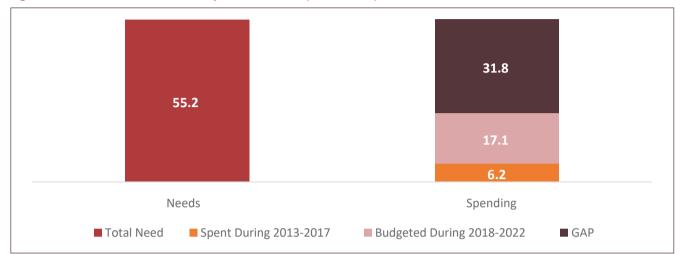


Figure 5. Total Finance Needs and Gap for HPP sector (million USD)

3.4 Mining sector

The need for biodiversity financing in mining sector amounted to USD 25.7 million, which is based on a very conservative estimate. Average price for remediation was calculated (with conservative approach) as USD 7.8 thousand per license and was based on 3,300 license holders. The table 10 below shows how the calculations were made.

Table 10. Mining sector calculations

Mining sector calculations (USD)			
Number of license holders	3,300		
Average Price of Remediation	7,800		
Total value	25,740,000		

It can be assumed that the price for individual remediation would be much higher in many cases, however it is hard to judge as each individual case involves many variables. The estimated number can be taken as a bare minimum estimate of the actual need. It was assumed that the need for financing is equal to the existing gap, as according to the data received from MENRP representatives, practically not a single remediation case took place in the previous five years.

The Figure 6 below presents the need and subsequent gap for the mining sector:

Figure 6. Total Finance Needs and Gap for mining sector (million USD)



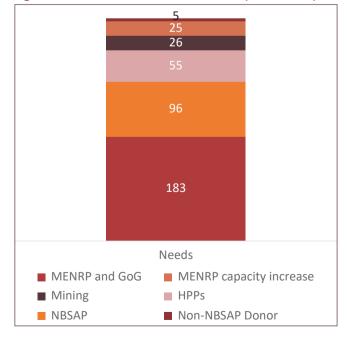
It must be noted that the spending by companies involved in such sectors, although qualified for the purposes of this report as spending on biodiversity, significantly differs in nature from the spending financed by donor organizations and the public sector. While the latter actors are aiming

to improve the level of biodiversity, the former actors are only intending to reduce the harmful impact of their business activities. Therefore, the statistical increase in such spending should be viewed with caution, as possibly indicating the increased pressure on biodiversity.

3.5 Total Funding Gap

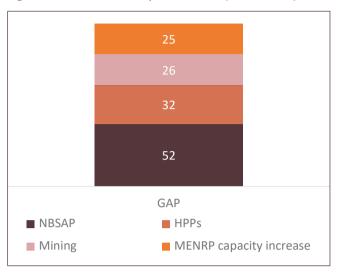
The total financing need was estimated at USD 390 million. The majority, or about 55%, consists of programs financed by GoG and the need for MENRP capacity improvement (salaries, additional staff, equipment etc.). Second largest category comprising the total finance need is NBSAP with approximately 25%. This is followed by HPP sector spending need (14%) and the mining sector spending need (7%). The Figure 7 below presents the breakdown:

Figure 7. Total Finance Needs breakdown (million USD)



Total gap amounts to USD 135 million for the next five years, or USD 31 million per year. The majority of the gap is due to NBSAP actions – 38% (USD 52 million), followed by HPP with 24% (USD 32 million), mining 19% (USD 26 million) and MENRP capacity increase 19% (USD 25 million). It is assumed that GoG programs receive the funding they need to function effectively. The Figure 8 with the abovementioned data is presented below:

Figure 8. Total Finance Gap breakdown (million USD)



4. RECOMMENDATIONS

Based on PIR, BER and FNA exercises, a number of areas were marked as having significant leverage potential to attract increased financing into the biodiversity sector in Georgia. Recommendations were based on such key leverage points, as to achieve highest results with relatively small investment. Each recommendation is based on analysis of the acquired data, outlining the most important information.

FNA data analysis point 1: Government is the largest contributor to the financing of biodiversity in Georgia

According to the results of BER and FNA, public sector spends the most to sustain biodiversity in Georgia. The share of government funds in total biodiversity financing is more than 75%. Donor financing amounts to 15-20% and private sector spending due to environmental regulations equals 5-10%.

Despite the large share in total biodiversity financing, the spending itself is a marginal amount compared to the total government budget. MENRP budget is less than half a percent of the total GoG budget. This fact indicates that there is significant potential to significantly close the gap, without putting too much strain on the public sector. Biodiversity protection community needs to concentrate its efforts on retaining/increasing the funds provided by the government. One of the most important factors to increase such funding is the better alignment of the objectives of the government with the needs of biodiversity.

FNA process revealed that program funding proposals submitted by MENRP to the Ministry of Finance lacked proper justification of the required funding. No strategic significance of the proposed actions was described and the overall objectives were not clearly identified, nor

aligned to the state goals. As a result, government budget allocated to biodiversity financing either remained the same, or increased only marginally.

An important step further in achieving increased financing is the improvement of the quality of such state budget program justifications, including the alignment of the goals of biodiversity with other goals of the state. One such area of potential alignment is the improvement of economic condition of Georgia's population, which is one of the most important priorities for the state, given existing economic hardships. Outlining the ways, in which the proposed programs would improve the quality of life of local population, would attract significant interest and subsequently increased financing.

<u>FNA data analysis point 2:</u> Significant spending on programs which are not part of NBSAP

FNA and BER exercises revealed that significant funds were being spent on activities not specified under NBSAP, as well as activities marked as Priority 3 and Priority 2, before Priority 1 actions have been fully completed. Inefficiency in allocation of funds indicates the lack of unified biodiversity vision to drive the spending of both donors and the government.

FNA exercise demonstrated that although NBSAP takes the role of the strategic action plan, its actions are not prioritized and are too broad and overreaching to be used as an effective basis for planning the activities and communicating priorities. One of the observed recommendations to potentially increase the flow of funding to biodiversity is the creation and promotion of a strategic plan, with relatively few prioritized actions. This strategic vision should be championed by MENRP and be used as the main basis for communication with

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the Ministry of Finance and both international and local donors.

FNA data analysis point 3: HPP & Mining sectors represent a significant part in total funding GAP

BIOFIN process uncovered that one of the most problematic areas of biodiversity financing is rooted in several developing sectors, such as HPP and mining. The spending requirements and existing regulations do not sufficiently insure that biodiversity is adequately preserved and protected. EIA completion checks reveal important shortfalls in HPP spending on mitigation measures, while Mining sector is regulated in a very limited manner. Both sectors have a significant impact on the surrounding nature and biodiversity in particular.

Therefore, addressing regulatory and other challenges in the mentioned sectors would potentially bring significant benefits to biodiversity maintenance. The need for improved regulation is specifically underlined by the significant potential of future development in these sectors.

FNA data analysis point 4: Voluntary private sector financing is absent from existing biodiversity expenditures

FNA process revealed that significant part of NBSAP actions were standalone projects with a relatively small implementation budget, with an indicative range of

up to \$ 50,000. Such actions can be easily financed by private companies as part of their CSR activities. Apart from private companies, such actions can be financed via targeted campaigns, aimed at attracting financing from private individuals. There were relatively few such campaigns aimed at reforestation of damaged areas, which gained popularity and attracted funds for biodiversity related causes.

The creation of mechanisms which would allow the flow of private funds into biodiversity related projects could channel untapped potential of the private sector into environmentally friendly causes. Currently, mechanisms aimed at donations are mainly targeted to help socially vulnerable households or groups, which leaves room for donation campaigns aimed at other sectors.

FNA data analysis point 5: Ministry requires increased financing for salaries, equipment, trainings

According to the results of FNA, MENRP requirement for additional staff, increased salaries and new equipment amounted to an estimated \$ 5 million per year. Such needs can relatively easily be financed via increased generation of MENRP own revenues. Generation of income, would make it easier for ministry representatives to argue for increased budget and improved capacity, promising to create even more revenue streams.

ANNEXES

Annex 1. NBSAP pricing assumptions table

	USD
Local expert rate	188
International expert rate	500
Training module	2,000
Training per person-day class 1	70
Training per person-day class 2	30
Training per person-day class 3	10
International capacity-building per person per day	1,000
Regional (Geographic) workshop (30 person in Tbilisi)	35,000
Workshop class 1 (20 person away from Town)	5,000
Workshop class 2 (30 person in Tbilisi in a Hotel)	2,000
Workshop class 3 (Meeting in a region/meeting at a ministry)	500
Ministry work day	20
Field work per day per person	50
Conservation plan implementation class 1	500,000
Conservation plan implementation class 2	200,000
Conservation plan implementation class 3	70,000
Management/reintroduction/conservation plan type 1	20,000
Management/reintroduction/conservation plan type 2	50,000
EUR/USD exchange rate	1.10
USD/GEL exchange rate	2.50

EUR/USD exchange rate	1.10
USD/GEL exchange rate	2.50
Management costs (mark-up to other costs)	50%

Annex 2. Biodiversity Department Capacity Increase Needs

Additional employees	Number	Monthly salary, Needs (USD)	Annual cost (USD)
Ornithologist	1	800	9,600
Zoologist	1	800	9,600
Botanist	1	800	9,600
GIS Specialist	1	800	9,600
Administrative	1	800	9,600
Forest caretaker	3	800	28,800
GIS Specialist forestry	2	800	19,200
Total additional employees	10	800	96,000

Salary	Number	Monthly salary, Needs (USD)	Monthly salary increase (USD)	Additional annual cost (6*12*400) (USD)
Existing employees	6	800	400	28,800

Equipment	Number	Price per unit (USD)	Useful life (years)	Annual cost (10,000/8) (USD)
Off-road car	1	10,000	8	1,250
Total Equipment				1,250

Trainings	Number of training days	Number of trainings per year	Price per training-day	Number of employees to be trained	Annual cost (5*3*40*16) (USD)
	5	3	40	16	9,600

Total Needs (5 years)	Additional Employees	Salary increase	Equipment	Trainings	Total
USD	480,000	144,000	6,250	48,000	678,250

Annex 3. Department of Environmental Supervision Capacity Increase Needs

Additional employees	Number	Monthly salary, Needs (USD)	Annual cost (USD)
Qualified experts	10	800	96,000
Engineer-technician	10	800	96,000
Hydrologist	3	800	28,800
Inspectors	30	800	288,000
Total additional employees	53	800	508,800

Salary	Number	Monthly salary, Needs (USD)	Monthly salary increase (USD)	Additional annual cost (409*400*12) (USD)
Existing employees	409	800	400	1,963,200

Equipment	Number	Price per unit (USD)	Useful life (years)	Annual cost (Price/Useful life*Number of units) (USD)
Off-road car	10	10,000	8	12,500
GIS system	9	15,000	5	27,000
Field printer	1	1,100	5	220
Ozone-degradant materials identification	9	10,000	5	18,000
Radioactivity detector	9	100	3	300
Tablets	50	100	4	1,250
Thermometer	20	25	2	250
Depth identification	20	200	4	1,000
Sterilizers	9	800	4	1,800
Laboratory for ballast water control	1	20,000	8	2,500
Ship	1	1,000	5	200
Drones	9	500	4	1,125
Total Equipment				66,145

Trainings	Number of training days	Number of trainings per year	Price per training-day	Number of employees to be trained	Annual cost (3*2*40*120) (USD)
	3	2	40	120	28,800

Total Needs (5 years)	Additional Employees	Salary increase	Equipment	Trainings	Total
USD	2,544,000	9,816,000	330,725	140,000	12,834,725

Annex 4. Agency of Protected Areas Capacity Increase Needs

Additional employees	Number	Monthly salary, Needs (USD)	Annual cost (USD)
Ichthyologist	2	640	15,360
Zoologist	2	680	16,320
Botanist	2	640	15,360
Ornithologist	1	600	7,200
Rangers caretaker	1	680	8,160
Lawyer	2	640	15,360
Total additional employees	10	647	77,760

Salary	Number	Monthly salary, Needs (USD)	Monthly salary increase (USD)	Additional annual cost (574*174.4*12) (USD)
Existing employees	574	647	174.4	1,201,267

Equipment	Number	Price per unit (USD)	Useful life (years)	Annual cost (Price/Useful life*Number of units) (USD)
Off-road car	30	10,000	8	37,500
Quadricycle	20	1,000	4	5,000
Computers	60	480	5	5,760
Total Equipment				48,260

Trainings	Number of training days	Number of trainings per year	Price per training-day	Number of employees to be trained	Annual cost (USD)
Training for rangers	5	1	20	450	45,000
Bio monitoring	5	1	30	100	15,000
Natural resources usage	5	1	40	250	50,000
Tourism	4	1	40	100	16,000

Trainings	Number of training days	Number of trainings per year	Price per training-day	Number of employees to be trained	Annual cost (USD)	
Ecosystem awareness	3	1	30	70	6,300	
Total cost					132,300	

Total Needs (5 years)	Additional Employees	Salary increase	Equipment	Trainings	Total	
USD	388,800	6,006,336	241,300	661,500	7,297,936	

Annex 5. National Forestry Agency Capacity Increase Needs

Salary	Number	Monthly salary, Needs (USD)	Monthly salary increase (USD)	Additional annual cost (914*71.3*12) (USD)
Existing employees	914	428	71.3	782,057

Equipment	Number	Price per unit (USD)	Useful life (years)	Annual cost (Average of APA, DES and Bio) (USD)
Total Equipment	-	-	-	38,552

Trainings	Annual cost (Average of APA, DES and Bio) (USD)
Total cost	56,900

Total Needs (5 years)	Additional Employees	Salary increase	Equipment	Trainings	Total	
USD	-	3,910,287	192,758	284,500	4,387,545	

Annex 6. Finance Needs Assessment short summary table

FNA items	Value of action (USD millions)	Spent (USD millions)	Remaining amount to spend (USD millions)	(Among them) Already allocated (USD millions)	GAP (USD millions	
NBSAP (Priority 1)	39.5	13.2	26.3	10.0	18.2	
NBSAP (Priority 2)	29.2	3.4	25.8	10.7	16.5	
NBSAP (Priority 3)	18.6	2.3	16.3	0.4	17.1	
NBSAP Total	88.5	20.1	68.5	21.2	51.8	

FNA items	Value of action (USD millions)	Spent (USD millions)	Remaining amount to spend (USD millions)	(Among them) Already allocated (USD millions)	GAP (USD millions
MENRP	152.6	70.3	82.3	82.3	0.0
Municipalities	4.2	2.6	1.6	1.6	0.0
Non-NBSAP spending	5.0	4.4	0.6	0.6	0.0
Other Ministries programs	26.5	12.2	14.2	14.2	0.0
Ministry Salaries	23.3	0.0	23.3	0.0	23.3
Ministry Equipment	0.8	0.0	0.8	0.0	0.8
Ministry Trainings	1.1	0.0	1.1	0.0	1.1
Small HPPs	14.8	2.2	12.5	5.0	7.5
Medium HPPs	26.6	2.8	23.9	8.4	15.5
Large HPPs	13.7	1.2	12.6	3.8	8.8
HPPs Total	55.2	6.2	49.0	17.1	31.8
Mining	25.7	0.0	25.7	0.0	25.7
Total	381.6	114.6	267.0	136.9	134.5

Annex 7. List of Hydro Power Plants for Gap calculation

Power Plants	Installed Capacity (MW)	Estimated Annual Generation (GW.h)	Туре	Commencment Data	Status	Size	River	Region	Approximate Value of EIA actions (USD)	Construction phase (over 5 years) USD	Operation phase (over 20 years) USD
Engurhesi	1,300	3,348	Seasonal Regulation	Existing	Existing	Large	Enguri	Samegrelo Upper Svaneti	968,750	0	968,750
Khudoni HPP	702	1,528	Seasonal Regulation	2022	Construction	Large	Enguri	Samegrelo Upper Svaneti	1,725,000	756,250	968,750
Namakhvani Cascade	411	1,560	Seasonal Regulation	2021	Construction	Large	Rioni	Racha-Lechkhumi and Lower Svaneti	1,725,000	756,250	968,750
Tskhenistskali Cascade	347	1,744	Seasonal Regulation	2024	Feasibility	Large		Racha-Lechkhumi and Lower Svaneti	1,725,000	756,250	968,750
Vardnilhesi	220	613	Seasonal Regulation	Existing	Existing	Large			968,750	0	968,750
Nenskra HPP	210	1,194	Seasonal Regulation	2021	Construction	Large	Nenskra	Samegrelo Upper Svaneti	1,725,000	756,250	968,750
Vartsikhehesi	184	829	Daily Regulation	Existing	Existing	Large			968,750	0	968,750
Oni Cascade	177	789	Run-of-River	2021	Feasibility	Large		Racha-Lechkhumi and Lower Svaneti	1,725,000	756,250	968,750
Shuakhevi HPP	175	437	Daily Regulation	2018	Construction	Large	Adjariskali	Adjara	1,725,000	756,250	968,750

Power Plants	Installed Capacity (MW)	Estimated Annual Generation (GW.h)	Туре	Commencment Data	Status	Size	River	Region	Approximate Value of EIA actions (USD)	Construction phase (over 5 years) USD	Operation phase (over 20 years) USD
Sadmeli HPP	153	638	Run-of-River	2021	Feasibility	Large	Rioni	Racha-Lechkhumi and Lower Svaneti	1,725,000	756,250	968,750
Koromkheti HPP	150	463	Daily Regulation	2020	Construction	Large	Adjariskali	Adjara	1,725,000	756,250	968,750
Zhinvalhesi	130	396	Seasonal Regulation	Existing	Existing	Large	Aragvi	Zhinvali, Dusheti	968,750	0	968,750
Khrami-1	113	217	Seasonal Regulation	Existing	Existing	Large	Khrami	Tsalka, Kvemo Kartli	968,750	0	968,750
Lajanurhesi	113	333	Daily Regulation	Existing	Existing	Large			968,750	0	968,750
Khrami-2	110	328	Seasonal Regulation	Existing	Existing	Large	Khrami	Tsalka, Kvemo Kartli	968,750	0	968,750
Dariali HPP	108	521	Run-of-River	2016	Construction	Large	Tergi	Mtskheta-Mtianeti	1,725,000	756,250	968,750
Faravanhesi	87	451	Run-of-River	Existing	Existing	Medium			484,375	0	484,375
Dzevrulhesi	80	148	Seasonal Regulation	Existing	Existing	Medium	Dzevrula	Terjola, Imereti	484,375	0	484,375
Alpana HPP	70	357	Run-of-River	2021	Feasibility	Medium	Rioni	Racha-Lechkhumi and Lower Svaneti	862,500	378,125	484,375
Gumathesi	67	277	Daily Regulation	Existing	Existing	Medium	Rioni	Tskaltubo, Imereti	484,375	0	484,375
Khertvisi HPP	65	239	Run-of-River	2021	Construction	Medium	Adjariskali	Adjara	862,500	378,125	484,375
Kheledula 3 HPP	60	255	Daily Regulation	2022	Feasibility	Medium			862,500	378,125	484,375
Kirnati HPP	51	219	Daily Regulation	2017	Construction	Medium	Chorokhi	Adjara	862,500	378,125	484,375
Mtkvari HPP	48	232	Run-of-River	2018	Construction	Medium	Mtkvari	Samtskhe-Javakheti	862,500	378,125	484,375
Rionhesi	48	287	Daily Regulation	Existing	Existing	Medium			484,375	0	484,375
Zoti HPP	48	225	HPP	2023	Feasibility	Medium		Guria	862,500	378,125	484,375
Khelvachauri HPP 1	48	230	Daily Regulation	2017	Construction	Medium	Chorokhi	Adjara	862,500	378,125	484,375
Khobi HPP 1	47	221	Daily Regulation	2018	Construction	Medium	Khobis- tskali	Samegrelo Upper Svaneti	862,500	378,125	484,375
Nobulevi HPP	42	197	Daily Regulation	2022	Feasibility	Medium	Tekhuri	Samegrelo Upper Svaneti	862,500	378,125	484,375
Khobi HPP 2	42	187	Run-of-River (Cascade)	2017	Construction	Medium	Khobis- tskali	Samegrelo Upper Svaneti	862,500	378,125	484,375
Magane and Lekarde Cascade	41	213	НРР	2023	Feasibility	Medium		Samegrelo Upper Svaneti	862,500	378,125	484,375

Power Plants	Installed Capacity (MW)	Estimated Annual Generation (GW.h)	Туре	Commencment Data	Status	Size	River	Region	Approximate Value of EIA actions (USD)	Construction phase (over 5 years) USD	Operation phase (over 20 years) USD
Shaorhesi	38	117	Seasonal Regulation	Existing	Existing	Medium	Shaori	Tkibuli, Imereti	484,375	0	484,375
Zahesi	36	166	Daily Regulation	Existing	Existing	Medium	Mtkvari	Tbilisi	484,375	0	484,375
Supsa HPP	31		НРР	2018	Construction	Medium		Chokhatauri, Guria	862,500	378,125	484,375
Dolra HPP 3	30	124	Run-of-River	2019	Feasibility	Medium	Dolra	Samegrelo Upper Svaneti	862,500	378,125	484,375
Erjia HPP	29	134	Daily Regulation	2022	Feasibility	Medium	Tekhuri, Lechekha	Samegrelo Upper Svaneti	862,500	378,125	484,375
Ckhimra HPP	28	134	Daily Regulation	2022	Feasibility	Medium	Tekhuri, Chkhorot- sku	Samegrelo Upper Svaneti	862,500	378,125	484,375
Mestiachala HPP 2	27	115	Run-of-River	2020	Construction	Medium	Mesti- chala	Samegrelo Upper Svaneti	862,500	378,125	484,375
Khadorhesi	24	120	Run-of-River	Existing	Existing	Medium			484,375	0	484,375
Metekhi HPP 1	24	131	Daily Regulation	2019	Feasibility	Medium	Mtkvari	Shida Kartli	862,500	378,125	484,375
Mestiachala 1 HPP	24	104	HPP	2021	Feasibility	Medium		Samegrelo Upper Svaneti	862,500	378,125	484,375
Machakhela HPP 1	23	127	Run-of-River (Cascade)	2020	Feasibility	Medium	Mach- akhela	Adjara	862,500	378,125	484,375
Samkuristskali 2 HPP	23	117	HPP	2020	Feasibility	Medium		Kakheti	862,500	378,125	484,375
Abuli HPP	22	116	Run-of-River	2015	Construction	Medium	Paravani	Samtskhe-Javakheti	862,500	378,125	484,375
Metekhi HPP 2	21	116	Daily Regulation	2019	Feasibility	Medium	Mtkvari	Shida Kartli	862,500	378,125	484,375
Chitakhevihesi	21	103	Run-of-River	Existing	Existing	Medium	Mtkvari	Borjomi	484,375	0	484,375
Vedi HPP	19	97	Run-of-River	2022	Feasibility	Medium			862,500	378,125	484,375
Akavreta HPP	19	82	Run-of-River	2021	Construction	Medium	Akavreta	Adjara	862,500	378,125	484,375
Larsihesi	19	111	Run-of-River	Existing	Existing	Medium		Mtskheta-Mtianeti	484,375	0	484,375
Machakhela HPP 2	19	115	Daily Regulation	2020	Feasibility	Medium	Mach- akhela	Adjara	862,500	378,125	484,375
Lechekha HPP	18	91	Decade Regulation	2022	Feasibility	Medium	Tekhuri, Lebarde	Samegrelo Upper Svaneti	862,500	378,125	484,375
Ortachalahesi	18	83	Daily Regulation	Existing	Existing	Medium	Mtkvari	Tbilisi	484,375	0	484,375
Larakvakva HPP	17	87	Run-of-River	2021	Feasibility	Medium	Larakvava	Samegrelo Upper Svaneti	862,500	378,125	484,375
Darchi HPP	17	94	Run-of-River	2021	Construction	Medium	Darchi	Samegrelo Upper Svaneti	862,500	378,125	484,375
Atshesi	16	58	Run-of-River	Existing	Existing	Medium	Adjariskali	Adjara	484,375	0	484,375

Power Plants	Installed Capacity (MW)	Estimated Annual Generation (GW.h)	Туре	Commencment Data	Status	Size	River	Region	Approximate Value of EIA actions (USD)	Construction phase (over 5 years) USD	Operation phase (over 20 years) USD
Barisakho HPP	15	77	Daily Regulation	2022	Feasibility	Medium			862,500	378,125	484,375
Chiora HPP	15	69	Run-of-River	2022	Feasibility	Medium			862,500	378,125	484,375
Tsablari HPP	15	63	Run-of-River	2018	Feasibility	Medium	Tsablar- istskali	Racha-Lechkhumi and Lower Svaneti	862,500	378,125	484,375
Ghebi HPP	14	73	Daily Regulation	2022	Feasibility	Medium			862,500	378,125	484,375
Satskhenhesi	14	27	Run-of-River	Existing	Existing	Medium	Iori	Gardabani, Lower Kartli	484,375	0	484,375
Stori 1 HPP	14	69	НРР	2019	Feasibility	Medium		Kakheti	862,500	378,125	484,375
Cirmindi HPP	13	66	Run-of-River	2022	Feasibility	Medium			862,500	378,125	484,375
Jonouli HPP 3	13	65	Run-of-River	2018	Feasibility	Medium	Jonouli	Racha-Lechkhumi and Lower Svaneti	862,500	378,125	484,375
Tetrikhevihesi	12	24	Run-of-River	Existing	Existing	Medium			484,375	0	484,375
Mazhieti HPP	12	56	Daily Regulation	2022	Feasibility	Medium			862,500	378,125	484,375
Bzhuzhahesi	12	85	Run-of-River	Existing	Existing	Medium	Bzhuzha	Ozurgeti, Guria	484,375	0	484,375
Lukhuni HPP 2	12	74	Run-of-River	2018	Construction	Medium	Lukhuni	Racha-Lechkhumi and Lower Svaneti	862,500	378,125	484,375
Natanebi 3 HPP	12	78	НРР	2019	Feasibility	Medium		Guria	862,500	378,125	484,375
Rachahesi	11	83	Run-of-River	Existing	Existing	Medium			484,375	0	484,375
Rachkha HPP	10	32	Run-of-River	2018	Construction	Medium		Tsageri, Racha- Lechkhumi and Lower Svaneti	862,500	378,125	484,375
Qvesheti HPP	10	67	Daily Regulation	2020	Feasibility	Medium			862,500	378,125	484,375
Bakhvihesi 3	10	39	Run-of-River	Existing	Existing	Medium	Bakhvists- kali	Ozurgeti, Guria	484,375	0	484,375
Ckhvandiri HPP	10	44	Run-of-River	2021	Feasibility	Small	Tskhvan- didi	Samegrelo Upper Svaneti	287,500	126,042	161,458
Zeda Bghugha HPP	10	41	Run-of-River	2019	Feasibility	Small	Bzhuzha	Guria	287,500	126,042	161,458
Lakhami HPP	10	99	Run-of-River	2019	Feasibility	Small	Lakhami	Samegrelo Upper Svaneti	287,500	126,042	161,458
Sionhesi	9	26	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Axmetahesi	9	55	Run-of-River	Existing	Existing	Small	Alazani		161,458	0	161,458
Aragvihesi	9	51	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Ghere HPP	8	45	Run-of-River	2022	Feasibility	Small			287,500	126,042	161,458

Power Plants	Installed Capacity (MW)	Estimated Annual Generation (GW.h)	Туре	Commencment Data	Status	Size	River	Region	Approximate Value of EIA actions (USD)	Construction phase (over 5 years) USD	Operation phase (over 20 years) USD
Kasleti HPP 1	8	46	Run-of-River	2019	Construction	Small	Kasleti	Samegrelo Upper Svaneti	287,500	126,042	161,458
Kasleti HPP 2	8	46	Run-of-River	2019	Construction	Small	Kasleti	Samegrelo Upper Svaneti	287,500	126,042	161,458
Lopota HPP 1	8	46	Run-of-River	2020	Feasibility	Small	Lopota	Kakheti	287,500	126,042	161,458
Udzilaurta HPP	8	38	Daily Regulation	2022	Feasibility	Small			287,500	126,042	161,458
Ubisa HPP	8	35	Run-of-River	2018	Construction	Small	Dzirula	Imereti	287,500	126,042	161,458
Vani HPP	8	45	Run-of-River	2019	Feasibility	Small	Supsa	Guria	287,500	126,042	161,458
Nakra HPP	8	35	НРР	2019	Feasibility	Small		Samegrelo Upper Svaneti	287,500	126,042	161,458
Natanebi 2 HPP	8	53	НРР	2019	Feasibility	Small		Guria	287,500	126,042	161,458
Bukistsikhe HPP	7	41	Run-of-River	2019	Feasibility	Small	Supsa	Guria	287,500	126,042	161,458
Supsa Mtsire HPP	7	44	Run-of-River	2019	Feasibility	Small	Supsa	Guria	287,500	126,042	161,458
Natanebi 1 HPP	7	49	НРР	2019	Feasibility	Small		Guria	287,500	126,042	161,458
Okrili HPP	7	31	Run-of-River	2021	Feasibility	Small	Okrili	Samegrelo Upper Svaneti	287,500	126,042	161,458
Surebi HPP	7	41	Run-of-River	2019	Feasibility	Small	Supsa	Guria	287,500	126,042	161,458
Paldo HPP	7	49	Run-of-River	2020	Feasibility	Small	lori	Mtskheta-Mtianeti	287,500	126,042	161,458
Jonouli HPP 2	7	30	Run-of-River	2018	Feasibility	Small	Jonouli	Racha-Lechkhumi and Lower Svaneti	287,500	126,042	161,458
Kvirila HPP	7	40	Run-of-River	2021	Feasibility	Small	Qvirila	Imereti	287,500	126,042	161,458
Ritseulahesi	6	35	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Alazani-2	6	42	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Kazbegihesi	6	39	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Skhalta HPP	6	27	Daily Regulation	2020	Construction	Small	Adjariskali	Adjara	287,500	126,042	161,458
Lajanuri 2 HPP	6	31	НРР	2021	Feasibility	Small		Racha-Lechkhumi and Lower Svaneti	287,500	126,042	161,458
Mleta HPP	5	36	Daily Regulation	2020	Feasibility	Small			287,500	126,042	161,458
Khadori 2	5	30	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Sashuala HPP 1	5	36	Run-of-River	2018	Feasibility	Small			287,500	126,042	161,458
Kintrisha HPP	5	30	Run-of-River	2016	Construction	Small	Kintrisha	Adjara	287,500	126,042	161,458

Power Plants	Installed Capacity (MW)	Estimated Annual Generation (GW.h)	Туре	Commencment Data	Status	Size	River	Region	Approximate Value of EIA actions (USD)	Construction phase (over 5 years) USD	Operation phase (over 20 years) USD
Sanaliahesi	5	8	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Shildahesi	5	35	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Sashuala HPP 2	5	34	Run-of-River	2018	Feasibility	Small			287,500	126,042	161,458
Alazanhesi	5	42	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Avani HPP	5	19	Run-of-River	2017	Feasibility	Small		Kakheti	287,500	126,042	161,458
Lajanuri 1 HPP	4	24	НРР	2021	Feasibility	Small		Racha-Lechkhumi and Lower Svaneti	287,500	126,042	161,458
Lajanuri 3 HPP	4	24	НРР	2021	Feasibility	Small		Racha-Lechkhumi and Lower Svaneti	287,500	126,042	161,458
Saguramo HPP	4	36	Run-of-River	2017	Construction	Small		Bodorna-Tbilisi	287,500	126,042	161,458
Larsi 2 HPP	4	22	HPP	2019	Feasibility	Small	Tergi	Mtskheta-Mtianeti	287,500	126,042	161,458
Mashavera- hesi	4	6	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Chkhorhesi	3	18	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Iphari HPP	3	14	НРР	2018	Feasibility	Small		Samegrelo Upper Svaneti	287,500	126,042	161,458
Khokhnistska- li HPP 3	3	18	Run-of-River	2020	Feasibility	Small	Khokh- nistskali	Adjara	287,500	126,042	161,458
Khelra HPP	3	12	НРР	2018	Feasibility	Small		Samegrelo Upper Svaneti	287,500	126,042	161,458
Misaktsieli Ento	3	12	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Artana HPP	3	14	Run-of-River	2020	Feasibility	Small	Didkhevi	Kakheti	287,500	126,042	161,458
Debeda HPP	3	13	Run-of-River	2016	Construction	Small	Debeda	Kvemo Kartli	287,500	126,042	161,458
Kazretihesi	3	14	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Lopotahesi	3	8	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Buja HPP 3	2	12	Run-of-River	2020	Feasibility	Small	Buja	Imereti	287,500	126,042	161,458
Abhesi	2	7	Run-of-River	Existing	Existing	Small	Abasha	Samegrelo Upper Svaneti	161,458	0	161,458
Kakharetihesi	2	15	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Pshavelahesi (Store Power)	2	9	Run-of-River	Existing	Existing	Small	Stori	Kakheti	161,458	0	161,458
Nabeglavi HPP	2	13	Run-of-River	2016	Construction	Small	Gubazeuli	Guria	287,500	126,042	161,458
Shilda 1 HPP	2	11	НРР	2018	Feasibility	Small	Chelti	Kakheti	287,500	126,042	161,458

Power Plants	Installed Capacity (MW)	Estimated Annual Generation (GW.h)	Туре	Commencment Data	Status	Size	River	Region	Approximate Value of EIA actions (USD)	Construction phase (over 5 years) USD	Operation phase (over 20 years) USD
Sioni HPP 1	2	8	Run-of-River	2019	Feasibility	Small			287,500	126,042	161,458
Sioni HPP 2	2	8	Run-of-River	2019	Feasibility	Small			287,500	126,042	161,458
Sioni HPP 3	2	8	Run-of-River	2019	Feasibility	Small			287,500	126,042	161,458
Intsobahesi	2	6	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Buja HPP 1	2	9	Run-of-River	2020	Feasibility	Small	Buja	Imereti	287,500	126,042	161,458
Bakuri (Mach- akhela)	2	6	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Okamihesi	2	8	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Chalahesi	2	4	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Kabalhesi	2	8	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Rustavhesi	2	4	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Shakshaketi HPP	2	8	НРР	2016	Feasibility	Small		Kareli, Shida Kartli	287,500	126,042	161,458
Skurdidi HPP	1	9	Run-of-River	2017	Construction	Small	Skurdidi	Adjara	287,500	126,042	161,458
Kinkishahesi	1	2	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Didkhevi HPP	1	7	Run-of-River	2018	Feasibility	Small		Kakheti	287,500	126,042	161,458
Khokhnistska- li HPP 1	1	8	Run-of-River	2020	Feasibility	Small	Khokh- nistskali	Adjara	287,500	126,042	161,458
Khokhnistska- li HPP 2	1	8	Run-of-River	2020	Feasibility	Small	Khokh- nistskali	Adjara	287,500	126,042	161,458
Dashbashi	1	11	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Tiriponhesi	1	16	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Algetahesi	1	4	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Jonouli HPP 1	1	5	Run-of-River	2017	Feasibility	Small	Jonouli	Racha-Lechkhumi and Lower Svaneti	287,500	126,042	161,458
Supsa Mtsire HPP	1	6	Run-of-River	2019	Feasibility	Small	Supsa	Guria	287,500	126,042	161,458
Igoetihesi	1	10	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Skurhesi	1	5	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Achihesi	1	5	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Buja HPP 2	1	5	Run-of-River	2020	Feasibility	Small	Buja	Imereti	287,500	126,042	161,458
Kheor HPP	1	7	Run-of-River	2018	Feasibility	Small			287,500	126,042	161,458
Pshavelahesi	1	12	Run-of-River	Existing	Existing	Small	Stori	Kakheti	161,458	0	161,458

Power Plants	Installed Capacity (MW)	Estimated Annual Generation (GW.h)	Туре	Commencment Data	Status	Size	River	Region	Approximate Value of EIA actions (USD)	Construction phase (over 5 years) USD	Operation phase (over 20 years) USD
Mashavera- hesi	1	3	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Sulorihesi	1	3	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Khertvisihesi	1	2	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Energetiki (Akhalk)	1	1	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Chapala HPP	1	3	Run-of-River	2018	Feasibility	Small			287,500	126,042	161,458
Pantianihesi	0	3	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Kazbegihesi 2	0	1	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Khanhesi	0	2	Run-of-River	Existing	Existing	Small			161,458	0	161,458
Zvaretihesi	0	1	Run-of-River	Existing	Existing	Small	Aragvi	Zhinvali, Dusheti	161,458	0	161,458
Dagvahesi	0	0	Run-of-River	Existing	Existing	Small			161,458	0	161,458

Annex 8. Finance Needs Assessment Detailed Breakdown Table

Category	Priority	Action #	Thematic Group (1)	Description of action	Value of action (USD)	Spent (USD)	Remaining amount to spend (USD)	(Among them) Already allocated (Amount)	GAP (USD)
NBSAP	1	C.2-o1.16	Species and Habitat	Develop and implement a Georgian sturgeon conservation management plan	548,000	0	548,000	48,000	500,000
NBSAP	1	A.1-o2.1	Awareness	Prepare and distribute informational materials—newsletters, brochures, newspapers, internet articles, documentaries, advertisements, banners, TV shows, etc.—that are targeted at the media along with local, women's and other specific groups	1,094,702	344,702	750,000	0	750,000
NBSAP	2	A.1-o2.2	Awareness	Organize trainings, competitions and conferences for target groups such as media partners, decision-makers, users of biological resources, teachers, schoolchildren, students, women's and community groups, etc.	140,000	8,000	132,000	0	132,000

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Category	Priority	Action #	Thematic Group (1)	Description of action	Value of action (USD)	Spent (USD)	Remaining amount to spend (USD)	(Among them) Already allocated (Amount)	GAP (USD)
NBSAP	3	A.1-o2.3	Awareness	Create a multimedia informational web portal, designed based on a single-window principle, for hosting comprehensive educational resources for targeted age groups	66,602	47,402	19,200	0	19,200
NBSAP	1	A.1-o2.4	Awareness	Conduct regular monitoring of the level of public awareness of biodiversity	173,947	133,947	40,000	0	40,000
NBSAP	1	C.2-o2.2	Species and Habitat	Develop a human-wildlife conflict management strategy, including mitigation measures and an effective response scheme.	60,968	39,968	21,000	0	21,000
NBSAP	2	A.1-o3.2	Awareness	Conduct a national awareness campaign on the issue of climate change as a threat to biodiversity	70,800	10,800	60,000	0	60,000
NBSAP	2	A.2-o1.1	Awareness	Provide, using different means of communication, information to the public on their right to have access to information and participate in decision-making processes at various levels	486,985	400,000	86,985	0	86,985
NBSAP	0	A.2-o1.5	Awareness	Develop and adopt regulations (or relevant changes therein) for public participation in the preparation of biodiversity-related policies and legislation as well as programmes	136,538	136,538	0	0	0
NBSAP	1	A.1-o1.1	Awareness	Establish a network of partners and local conservation support groups including local NGOs, CBOs and research and education organizations for the implementation of public communication, education, and awareness raising at national and local levels	48,000	18,000	30,000	0	30,000
NBSAP	3	A.1-o3.1	Awareness	Organise workshops for national and local governments on the impacts of climate change on biodiversity	82,688	0	82,688	0	82,688

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NBSAP	2	A.2-o1.6	Agrobiodiver- sity	Prepare updated informational and educational materials on biosafety and agrobiodiversity for farmer's extension centres and provide access to regularly updated information, with an emphasis on gender equality, to all farmers	30,900	0	30,900	0	30,900
NBSAP	3	A.2-o2.1	Awareness	Increase the capacity of the staff of relevant governmental agencies (including through trainings) with regard to public communication and involvement in matters related to biodiversity	22,500	0	22,500	0	22,500
NBSAP	3	A.2-o2.4	Awareness	Strengthen local governments with regard to ensuring pubic communication and involvement in decision making processes	231,392	82,386	149,006	41,193	107,813
NBSAP	3	A.2-o2.2	Awareness	Improve public participation in decisions related to biodiversity conservation and use, including through the introduction of changes to the existing legislation	18,750	0	18,750	0	18,750
NBSAP	2	A.3-o1.2	Cross-cutting	Develop national guidelines for the integration of biodiversity conservation into sectoral and cross-sectoral policies and strategies	221,592	18,930	202,662	13,287	189,375
NBSAP	2	A.2-o2.3	Awareness	Strengthen local NGOs, CBOs and local women's groups and encourage their involvement in the decision- making in and monitoring of development projects as well as in biodiversity conservation and resource- use planning	180,000	0	180,000	0	180,000
NBSAP	2	A.2-o2.5	Awareness	Monitor public consultations and involvement and the integration of the public's views into the decision- making processes; organise biennial reviews of the situation	18,750	0	18,750	0	18,750

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NBSAP	3	A.3-o2.2	Species and Habitat	Elaborate and implement a communication strategy for decision makers, local communities and women's groups on the economic values of biodiversity and ecosystems	47,250	0	47,250	0	47,250
NBSAP	0	A.3-o2.3	Species and Habitat	Integrate the results of the TEEB study into development, agriculture, poverty eradication and other relevant programmes as well as into the national statistics	0	0	0	0	0
NBSAP	3	A.3-o3.1	Cross-cutting	Conduct a review of the regulations for licensing and permit issuance for the use of natural resources with respect to the mitigation of their impact on biodiversity and protected areas and incentives for conservation	18,375	0	18,375	0	18,375
NBSAP	3	A.3-o3.2	Cross-cutting	Increase the capacity of licensing and permit-issuing units through training and provision of resources (including equipment)	41,100	0	41,100	0	41,100
NBSAP	1	A.3-o3.3	Cross-cutting	Elaborate and adopt guidelines for the control and monitoring of licences involving the use of natural resources such as forestry, hunting, fishing, etc.	240,000	0	240,000	0	240,000
NBSAP	2	A.3-o3.4	Cross-cutting	Establish mechanisms that ensure that all decisions on providing special conditions and/or subsidies to farmers and on preventive and quarantine measures in plant or veterinary protection take into account their potential impact on the environment and are taken through public consultations	21,938	0	21,938	0	21,938
NBSAP	1	A.3-04.1	Cross-cutting	Improve the existing regulatory framework through the integration of the country's obligations that derive from its bilateral and multi-lateral agreements into the national legislation	39,750	0	39,750	0	39,750

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NBSAP	2	A.3-o4.2	Cross-cutting	Define and ensure a clear distribution of powers and competences in biodiversity conservation and use among the national, regional and local government	31,875	0	31,875	0	31,875
NBSAP	2	A.4-01.2	Biosafety	Establish a control system for transboundary movement, introduction and placement on the market of LMOs; designate a responsible unit in each relevant governmental agency and ensure exchange of information between them	376,500	55,207	321,293	291,293	30,000
NBSAP	0	A.3-o4.3	Cross-cutting	Establish a committee for the supervision and monitoring of NBSAP implementation	0	0	0	0	0
NBSAP	1	A.3-04.6	Agrobiodiver- sity	Prohibit the import of non- native breeds of bees	11,625	0	11,625	0	11,625
NBSAP	3	A.4-o1.3	Biosafety	Ratify The Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress and integrate its requirements into the legislation	2,275	0	2,275	0	2,275
NBSAP	3	A.4-o1.4	Biosafety	Increase the capacities of relevant governmental agencies, taking into account the gender dimension, through organising regular trainings in LMO management, control and monitoring	85,125	0	85,125	0	85,125
NBSAP	3	A.4-o2.1	Biosafety	Establish (designate, equip and provide human resources and trainings) a central referral laboratory for LMO detection and identification based on a costeffectiveness analysis	25,781	0	25,781	0	25,781
NBSAP	3	A.4-o2.2	Biosafety	Equip and provide gender- balanced personnelto two laboratories for LMO detection and identification	261,000	0	261,000	0	261,000
NBSAP	2	A.4-o2.3	Biosafety	Adopt methods of LMO detection and identification using international best practices	28,594	0	28,594	0	28,594
NBSAP	3	A.4-o3.1	Biosafety	Organise trainings and exchange programmes in LMO risk assessment and management	66,000	0	66,000	0	66,000

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NBSAP	1	B.1-o1.4	Species and Habitat	Conduct a preliminary assessment of the selected priority habitats, including their mapping and an assessment of primary limiting factors	264,000	55,000	209,000	44,000	165,000
NBSAP	3	A.4-o3.2	Biosafety	Elaborate and adopt guidelines for LMO risk assessment and management using international best practices	19,125	0	19,125	0	19,125
NBSAP	1	B.1-o1.7	Species and Habitat	Elaborate and adopt national guidelines for the assessment of habitats	37,206	4,956	32,250	0	32,250
NBSAP	1	B.1-o2.1	Forest	Monitor the rate of the loss and degradation of forest habitats	1,683,803	375,039	1,308,764	1,308,764	0
NBSAP	2	B.1-o2.10	Forest	Elaborate an action plan for the combating of forest pests and diseases and support its implementation	267,787	68,287	199,500	0	199,500
NBSAP	1	B.1-o2.4	Forest	Evaluate illegal logging at the regional and national levels	18,502,704	7,583,424	10,919,280	9,479,280	1,440,000
NBSAP	1	B.1-o1.3	Species and Habitat	Establish mechanisms for the prevention and eradication of habitat degradation	40,313	0	40,313	0	40,313
NBSAP	1	B.1-o2.7	Forest	Elaborate a policy document on the combating of forest fires and support its implementation	768,000	252,000	516,000	0	516,000
NBSAP	1	B.1-o2.8	Forest	Ensure a clear definition and distribution of roles and responsibilities of central and local entities with respect to the detection of and response to wild fires	69,667	69,667	0	0	0
NBSAP	1	B.1-o1.6	Species and Habitat	Elaborate and adopt national guidelines for the management of wetlands	32,250	0	32,250	0	32,250
NBSAP	2	B.2-o1.2	Species and Habitat	Assess the status and distribution of invasive alien species and conduct a modelling of the threats they pose to native biodiversity and ecosystems	366,867	45,305	321,563	0	321,563
NBSAP	2	B.1-o2.5	Forest	Evaluate the impact of grazing on forests at the regional and national levels	84,375	0	84,375	0	84,375

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NBSAP	2	B.2-o1.1	Species and Habitat	Identify, assess and prevent the existing and potential pathways of invasive alien species into the country's terrestrial, freshwater and marine ecosystems	120,938	0	120,938	0	120,938
NBSAP	2	B.2-o1.4	Black Sea	Establish effective measures for the control of the populations of marine alien species, including Mnemyopsys leidi and Rapana venosa	53,625	0	53,625	0	53,625
NBSAP	2	B.3-o1.2	Black Sea	Mitigate/eradicate the human causes of marine eutrophication through the establishment of relevant effective mechanisms	79,313	0	79,313	0	79,313
NBSAP	2	B.3-o2.1	Agrobiodiver- sity	Introduce amendments to the legislation on agriculture that ensure a reduction of pollution from agriculture, sustainable functioning of agroecosystems and the conservation of agrobiodiversity	23,906	0	23,906	0	23,906
NBSAP	2	B.3-o2.2	Agrobiodiver- sity	Ensure the combating of pests and diseases by methods that do not impair the integrity of agrarian ecosystems	146,400	0	146,400	0	146,400
NBSAP	1	B.3-o3.1	Inland Waters	Adopt laws and regulations which ensure the effective regulation of the pollution of inland waters	97,125	0	97,125	0	97,125
NBSAP	2	B.3-o3.2	Inland Waters	Establish a system to assess the biological state of inland water ecosystems	52,500	0	52,500	0	52,500
NBSAP	3	B.4-o1.5	Agrobiodiver- sity	Integrate management methods related to agroecosystems and natural grasslands into at least three regional strategic documents and six municipal annual work plans	885,411	155,274	730,137	77,637	652,500
NBSAP	1	B.4-o1.6	Agrobiodiver- sity	Elaborate sustainable management plans for the pastures situated within protected areas	840,951	264,951	576,000	0	576,000

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NBSAP	1	B.4-o1.2	Agrobiodiver- sity	Establish terms and conditions for the leasing or privatisation of state-owned pastures	0	0	0	0	0
NBSAP	3	B.4-o1.3	Agrobiodiver- sity	Elaborate and adopt a sectoral plan for the management of agrarian areas and the restoration of the most contaminated/ degraded lands	92,813	0	92,813	0	92,813
NBSAP	3	B.4-o2.1	Agrobiodiver- sity	Implement pilot projects on the sustainable management of natural grasslands in at least six municipalities using specially designed certification and labelling schemes	925,313	0	925,313	0	925,313
NBSAP	2	B.4-o2.3	Agrobiodiver- sity	Implement at least four pilot projects on sustainable harvest schemes for wildgrowing plants	30,563	0	30,563	0	30,563
NBSAP	3	B.4-o3.1	Agrobiodiver- sity	Assess the status of agricultural soils and natural grasslands; identify the most degraded, contaminated and high risk areas	11,488,000	0	11,488,000	0	11,488,000
NBSAP	1	B.5-o1.1	Black Sea	Assess the ecological consequences of commercial fisheries	33,750	0	33,750	0	33,750
NBSAP	1	B.5-o1.2	Black Sea	Identify commercial fish species and define their harvest quotas	29,250	0	29,250	0	29,250
NBSAP	2	B.5-o1.3	Black Sea	Conduct monitoring of catches and populations of commercial marine fish species	519,000	0	519,000	0	519,000
NBSAP	1	B.5-o1.4	Black Sea	Further refine fishing methods with respect to catching equipment and techniques (including the permitted mesh size and the prohibition of trawling, etc.)	11,250	0	11,250	0	11,250
NBSAP	2	B.5-o2.1	Inland Waters	Define suitable fish species and water bodies for aquaculture development and evaluate ecological and economic values of specific stocks	124,875	0	124,875	0	124,875

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NBSAP	3	B.5-o2.2	Inland Waters	Prepare recommendations for ecologically-friendly fish breeding and pond productivity management methods	62,625	0	62,625	0	62,625
NBSAP	1	B.5-o2.3	Inland Waters	Integrate an ecosystem approach into aquaculture practices	51,000	0	51,000	0	51,000
NBSAP	2	B.6-o1.1	Species and Habitat	Develop a national sustainable hunting strategy in a participatory manner using international best practices	558,125	0	558,125	485,000	73,125
NBSAP	2	C.1-o1.6	Agrobiodiver- sity	Conduct inventories of plant and animal landraces and CWRs (including plants harvested for food and medicine), of endemic microflora found in traditional products and of related traditional knowledge; assess their statuses and create a relevant red list	156,203	25,891	130,313	0	130,313
NBSAP	3	C.2-o1.1	Species and Habitat	Conduct an economic valuation of rare and economically important species so that an adequate calculation can be made of (i) damage to the state caused by the unauthorised removal of these species and (ii) ecosystem services provided by the species	198,750		198,750	0	198,750
NBSAP	1	C.1-o1.1	Species and Habitat	Determine the conservation statuses of rare animal species and introduce changes to the National Red List accordingly	87,938	0	87,938	0	87,938
NBSAP	3	C.1-o1.2	Species and Habitat	Create checklists of poorly- studied fauna—especially invertebrate groups	100,000	0	100,000	0	100,000
NBSAP	2	C.2-o1.12	Species and Habitat	Update and implement the existing Caucasian leopard conservation management plan	699,069	118,178	580,890	60,890	520,000

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NBSAP	3	C.2-o1.10	Species and Habitat	Develop and implement a Georgian viper conservation management plan	90,000	0	90,000	0	90,000
NBSAP	2	C.2-o1.11	Species and Habitat	Develop and implement a Caucasian salamander conservation management plan	90,000	0	90,000	0	90,000
NBSAP	1	C.2-o1.13	Species and Habitat	Update and implement the Georgian tur(Capra cylindricornis and C. caucasica) conservation management plan	520,000	0	520,000	0	520,000
NBSAP	2	C.2-o1.14	Species and Habitat	Develop and implement a water bird conservation management plan	90,000	0	90,000	0	90,000
NBSAP	2	C.2-o1.15	Species and Habitat	Develop and implement a Georgian vulture conservation management plan	90,000	0	90,000	0	90,000
NBSAP	2	C.2-o1.22	Species and Habitat	Assess the international trade of Georgian flora species	85,082	43,832	41,250	0	41,250
NBSAP	1	C.2-o1.23	Species and Habitat	Increase the capacity of the Georgian CITES Management et Authority and the Georgian customs in implementing CITES through institutional strengthening and raising qualifications of its employees	239,779	13,279	226,500	0	226,500
NBSAP	3	C.2-o1.21	Species and Habitat	Restore at least 10% of the natural populations of threatened plant species	274,000	0	274,000	0	274,000
NBSAP	1	C.2-o1.24	Species and Habitat	Conduct assessments of the wild populations of plant species that are involved in international trade.	307,500	0	307,500	0	307,500
NBSAP	2	C.2-o1.3	Species and Habitat	Improve the procedures of calculating damage to the state in cases of poaching of endangered species	28,125	0	28,125	0	28,125
NBSAP	1	C.2-o1.6	Species and Habitat	Develop and implement a nationwide bezoar goat conservation management plan and a reintroduction plan for Borjomi	520,000		520,000	0	520,000

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NBSAP	1	C.2-o1.5	Species and Habitat	Develop and implement a red deer conservation management plan	550,000	0	550,000	0	550,000
NBSAP	1	C.2-o1.8	Species and Habitat	Develop and implement a brown bear conservation management plan	269,006	19,006	250,000	0	250,000
NBSAP	2	C.2-o1.7	Species and Habitat	Implement the existing Chiroptera conservation management plan	220,000	0	220,000	0	220,000
NBSAP	1	C.2-o2.1	Species and Habitat	Identify and assess the most common forms of human-wildlife conflict and the species involved.	356,904	232,404	124,500	0	124,500
NBSAP	1	C.2-o1.9	Species and Habitat	Develop and implement a Eurasian otter conservation management plan	90,000	0	90,000	0	90,000
NBSAP	1	C.2-o2.3	Species and Habitat	Set up units responsible for human-wildlife conflict management and response at the national and local levels	381,400	0	381,400	0	381,400
NBSAP	2	C.3-o1.2	Forest	Promote active participation of the Georgian forestry authorities in international forestry processes (including Forest Europe); harmonise the Georgian forest policy, legislation and standards with EU requirements	133,456	0	133,456	110,956	22,500
NBSAP	1	C.3-o1.3	Forest	Define and implement an optimal institutional structure for the Georgian forestry sector: define the roles and responsibilities of the state and private sectors, local communities and local self-government authorities	39,600	0	39,600	23,760	15,840
NBSAP	0	C.3-o2.1	Forest	Revise the forest code in a participatory manner	117,800	117,800	0	0	0
NBSAP	0	C.3-o2.2	Forest	Adopt relevant forest regulations and standards, in a participatory way, that promote sustainable use of non-wood products, the restoration of natural forest landscape and adaptation to and mitigation of climate change	880	880		0	0

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NBSAP	1	C.4-o1.1	Protected Areas	Improve the PA legislation (by the approval of a full set of regulations) using the latest IUCN guidelines	97,793	32,168	65,625	0	65,625
NBSAP	1	C.4-o2.1	Protected Areas	Identify existing gaps in the protected areas system using modern methodologies of spatial analysis	76,875	0	76,875	0	76,875
NBSAP	1	C.4-o2.2	Protected Areas	Develop a plan for the protected areas system and network development	36,938	0	36,938	0	36,938
NBSAP	1	C.4-04.1	Species and Habitat	Initiate the establishment of ecological corridors that consider national PA categories	5,060,000	258,459	4,801,541	951,541	3,850,000
NBSAP	1	C.4-o5.1	Protected Areas	Develop the knowledge and capacity of the personnel of the APA and PA administrations through regular training programs	392,935	12,370	380,565	180,565	200,000
NBSAP	1	C.4-o5.2	Protected Areas	Prepare management plans for protected areas that do not have them	1,110,000	450,000	660,000	385,000	275,000
NBSAP	1	C.4-05.4	Protected Areas	Assess the feasibility of various mechanisms for the avoidance/mitigation of any direct and indirect impacts on PAs from land use and/ or development projects outside of PAs; introduce relevant changes to all related laws	47,813	0	47,813	0	47,813
NBSAP	2	C.4-05.5	Protected Areas	Establish a regulatory framework for the enforcement of the APA's rights (given to it by law) to avoid/mitigate any direct and indirect impacts on PAs from land use and/or development projects outside of PAs	31,875	0	31,875	0	31,875
NBSAP	1	C.4-o5.6	Protected Areas	Conduct regular assessments of protected areas management effectiveness	62,250	0	62,250	0	62,250

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NBSAP	2	C.4-o5.7	Protected Areas	Increase involvement of stakeholders—especially of local communities (with due regard to gender equality)—in the management and planning of protected areas	314,029	19,029	295,000	55,000	240,000
NBSAP	2	C.4-o6.1	Protected Areas	Assess the feasibility of introducing various types of PA management; implement pilot projects	56,250	0	56,250	0	56,250
NBSAP	3	C.4-o6.2	Protected Areas	Assess the feasibility of and implement compensation mechanisms and incentives for biodiversity protection and sustainable use in PAs	37,500	0	37,500	0	37,500
NBSAP	1	C.4-07.1	Protected Areas	Develop and agree upon a framework for transboundary cooperation between the PAs of Georgia and those of neighbouring countries	462,934	329,495	133,439	86,564	46,875
NBSAP	3	C.5-o1.1	Agrobiodiver- sity	Ensure improved access through improved cooperation between scientists and industrialists of both male and female farmers to seed/planting/breeding material of crop and animal landraces as well as to knowledge related to their cultivation/breeding	69,750	0	69,750	0	69,750
NBSAP	3	C.5-o1.2	Agrobiodiver- sity	Improve the recognition of crop and animal landraces and traditional products on the market through the development of certification schemes and the arrangement of regional fairs of local breeds and products, testing events, festivals and promotion campaigns	225,000	0	225,000	0	225,000

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NBSAP	2	C.5-o1.3	Agrobiodiver- sity	Implement on-farm conservation programs of identified crop and animal landraces in the regions of their origin (preferably in the support zones of the protected areas); conduct trainings for local farmers in conservation, cultivation/breeding, primitive selection and production and marketing of traditional products	600,000	0	600,000	0	600,000
NBSAP	2	C.5-o1.4	Agrobiodiver- sity	Conduct an inventory of CWRs (incl. wild plants harvested for food and medicine) in protected areas and create maps of their distribution; incorporate their conservation in the management plans of their respective protected areas	316,875	0	316,875	0	316,875
NBSAP	2	C.5-o1.5	Agrobiodiver- sity	Implement urgent intervention measures to save landraces that are under threat of imminent extinction	450,000	0	450,000	0	450,000
NBSAP	2	C.5-o1.6	Agrobiodiver- sity	Identify priority traditional fermented products and collect their starter cultures; study and isolate those starters	152,813	0	152,813	0	152,813
NBSAP	3	C.5-o1.7	Agrobiodiver- sity	Register starter cultures of the identified traditional fermented products according to the relevant IPR legislation and implement at last three projects to facilitate their commercial production	1,504,219	0	1,504,219	0	1,504,219
NBSAP	2	C.5-o2.1	Agrobiodiver- sity	Create a legal framework for state coordination of both the ex situ conservation of agrobiodiversity and the status and operation of the ex situ collections of national importance	16,875	0	16,875	0	16,875
NBSAP	2	C.5-o2.2	Agrobiodiver- sity	Adopt a list of ex situ collections of national importance and agree on their funding schemes	28,875	0	28,875	0	28,875

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NBSAP	3	C.5-o2.3	Agrobiodiver- sity	Adopt a system for benefit sharing from and access to genetic material maintained in the ex situ collections in full compliance with the principles defined in ITPGRFA and the Nagoya Protocol of the CBD	19,984	19,984	0	0	0
NBSAP	2	C.5-o2.6	Agrobiodiver- sity	Organize targeted expeditions to enrich the collections of crop landraces (especially grapes, fruits, vegetables and forage crops) and CWRs, as well as the starter cultures of traditional products	458,438	0	458,438	0	458,438
NBSAP	2	C.5-o2.7	Agrobiodiver- sity	Improve the management/ financing of the nationally important ex situ collections of local crop and domestic animal landraces/microflora of traditional products to ensure their long-term maintenance and renewal	34,594	0	34,594	0	34,594
NBSAP	3	C.5-o2.8	Agrobiodiver- sity	Conduct a full inventory of the samples kept in the ex situ collections of national importance; develop databases and set up an intellectual property rights management system according to currently effective legislation	81,563	0	81,563	0	81,563
NBSAP	1	C.6-o1.1	Black Sea	Create a new protected area covering the Sarpi-Kvariati and Mtsvane Kontskhi areas	112,447	16,072	96,375	0	96,375
NBSAP	2	C.6-o1.10	Black Sea	Define the conservation status of marine fish species	44,156	0	44,156	0	44,156
NBSAP	2	C.6-o1.11	Black Sea	Develop and implement a plan for the restoration of marine fish populations	1,100,000	0	1,100,000	0	1,100,000
NBSAP	3	C.6-o1.12	Black Sea	Study the distribution and densities of sea invertebrates, especially those of commercial value (mussels etc.), and implement restoration measures if needed	88,953	0	88,953	0	88,953

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NBSAP	1	C.6-o1.3	Black Sea	Identify damaged areas of the sea floor and determine the causes of the damage; prepare restoration plans for these areas as needed	744,255	0	744,255	0	744,255
NBSAP	1	C.6-o1.4	Black Sea	Create artificial reefs to increase the size of the habitats of certain species	720,000	0	720,000	0	720,000
NBSAP	1	C.6-o1.5	Black Sea	Create a map of Black Sea habitats	120,938	0	120,938	0	120,938
NBSAP	2	C.6-o1.6	Black Sea	Conduct a study on the number and distribution of cetaceans in the Black Sea	147,487	27,487	120,000	24,000	96,000
NBSAP	2	C.6-o1.8	Black Sea	Develop a system of monitoring of cetaceans cast ashore within the framework of the National Biodiversity Monitoring system	0	0	0	0	0
NBSAP	1	C.6-o1.9	Black Sea	Monitor bycatch, including the bycatch of cetaceans	484,000	0	484,000	0	484,000
NBSAP	2	C.6-o2.1	Inland Waters	Assess the composition and populations of fish species in select inland waters	798,000	0	798,000	0	798,000
NBSAP	2	C.6-o2.3	Inland Waters	Develop and implementconservation management plans for select fish species	1,100,000	0	1,100,000	0	1,100,000
NBSAP	3	D.1-o1.2	Agrobiodiver- sity	Assess the institutional and financial implications of the ratification of the ITPGRFA; ratify and the Protocol and adopt relevant legislation	12,375	0	12,375	0	12,375
NBSAP	1	D.2-o1.1	Species and Habitat	Assess the impact of climate change on biodiversity in vulnerable areas(e.g. Dedoplistskaro, Gardabani, Sagarejo, the Black Sea coast, high mountain areas, The Iori Plateau, and Karasani Ridge) and protected areas; develop relevant recommendations using methodologies accepted among the research and NGO circles	700,000	0	700,000	0	700,000

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NBSAP	2	D.2-o1.2	Species and Habitat	Organize meetings and workshops to facilitate the integration of measures and recommendations against preliminarily identified problems related to climate change into sectoral strategic and local plans	155,625	0	155,625	0	155,625
NBSAP	2	D.2-o1.4	Species and Habitat	Implement appropriate international mechanisms that are suggested by UNFCCC (REDD+, international carbon market) for the benefit of biodiversity conservation	150,000	0	150,000	0	150,000
NBSAP	2	E.1-o1.2	Species and Habitat	Create an updatable database of "27 Priority Habitats"	400,000	0	400,000	0	400,000
NBSAP	1	E.2-o1.3	Awareness	Improve the biodiversity teaching component in training programmes for teachers in preschool institutions and schools	73,185	3,060	70,125	0	70,125
NBSAP	2	E.2-o1.5	Awareness	Improve the teaching of biodiversity (including of agrobiodiversity and the microbiology of traditional products) in the curricula of relevant professional and higher education institutions and develop relevant information resources	44,813	0	44,813	0	44,813
NBSAP	3	E.2-o1.6	Awareness	Support short-term courses (at institutions of higher education) in biodiversity for specialists of various sectors related to biodiversity conservation and use	20,625	0	20,625	0	20,625
NBSAP	1	E.2-o1.8	Awareness	Provide trainings to PA staff so that they are able to lead education activities for different age groups	63,902	7,202	56,700	0	56,700

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NBSAP	2	E.3-o1.1	Awareness	Establish effective mechanisms for public communication and participation in decisions at all levels that are made on natural resources utilisation; this should be done in accordance with the requirements of the CBD and international best practices	0	0	0	0	0
NBSAP	2	B.1-o2.6	Forest	Conduct pilot projects that demonstrate sustainable grazing methods and modern approaches that help reduce grazing pressure on the forest; promote the replication of successful approaches	171,000	11,000	160,000	0	160,000
NBSAP	1	C.4-o3.1	Protected Areas	Establish new protected areas of different categories	345,000	20,000	325,000	165,000	160,000
NBSAP	1	C.4-o3.2	Protected Areas	Expand existing protected areas as needed	40,000	0	40,000	40,000	0
NBSAP	1	C.4-03.3	Protected Areas	Increase the international recognition of Georgia's protected areas and support the establishment of new protected areas using international instruments such as a Ramsar sites, UNESCO World Nature Heritage Sites and Biosphere Reserves.	1,000,894	335,768	665,126	621,126	44,000
NBSAP	2	A.3-o4.4	Cross-cutting	Elaborate relevant policies for local governments that entitle them to more power in the field of biodiversity conservation and use and ensure the strengthening of their capacities	0	0	0	0	0
NBSAP	2	A.3-04.7	Agrobiodiver- sity	Introduce amendments to the copyright law to ensure the protection of traditional products and their names on national and international markets	0	0	0	0	0

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NBSAP	0	A.3-05.1	Cross-cutting	Introduce legal amendments that ensure that an EIA is required for any infrastructure development or other project that may have a significant impact on biodiversity and ecosystems (or protected areas), and provide for adequate law enforcement (e.g. ensure that the conduction of EIAs prior to the commencement of development activities is enforced)	0	0	0	0	0
NBSAP	0	B.1-o1.1	Forest	Develop and submit to the Parliament for approval a forestry legislation that is fully based on the principles of sustainable use	0	0	0	0	0
NBSAP	0	B.1-o1.2	Forest	Set up optimal entities for forest management	291,399	180,443	110,956	110,956	0
NBSAP	2	B.2-o1.5	Black Sea	Conduct monitoring of invasive alien species within the framework of the National Biodiversity monitoring System	0	0	0	0	0
NBSAP	2	B.4-o1.1	Agrobiodiver- sity	Introduce amendments to the legislation to provide for the sustainable management of community pastures and define the responsible entities	0	0	0	0	0
NBSAP	3	B.4-o3.3	Agrobiodiver- sity	Conduct an inventory of state-owned grasslands	0	0	0	0	0
NBSAP	3	B.6-o1.3	Species and Habitat	Set up a system (framework and facilities) for hunter training and certification	107,813	0	107,813	0	107,813
NBSAP	1	C.1-o1.3	Species and Habitat	Create electronic databases of fauna and flora	134,625	55,207	79,418	36,293	43,125
NBSAP	3	C.5-o2.5	Agrobiodiver- sity	Permanently replenish the ex situ collections with samples of landraces maintained in the collections/gene banks of foreign countries using the instruments of ITPGRFA and the Nagoya Protocol of the CBD	0	0	0	0	0

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NBSAP	2	C.6-o2.2	Inland Waters	Conduct full inventories and identify threatened species of plant life and invertebrate fauna in natural lakes that are especially important for biodiversity; implement relevant conservation measures as needed	0	0	0	0	0
NBSAP	2	A.3-o1.1	Cross-cutting	Establish Strategic Environmental Assessments (SEAs) for national plans, programmes and legislation development processes that take account of biodiversity and ecosystem services	125,281	110,000	15,281	0	15,281
NBSAP	2	A.3-04.5	Agrobiodiver- sity	Create a legal framework that establishes the status of agrobiodiversity, its inventory, protection from biopiracy, stock/seed production, the coordination of ex situ conservation and a favourable environment for in situ conservation	89,009	42,509	46,500	0	46,500
NBSAP	1	A.3-05.3	Cross-cutting	Establish fair and adequate compensation schemes for those cases in which the impact on the natural environment is unavoidable	132,750	0	132,750	0	132,750
NBSAP	3	A.4-o1.1	Biosafety	Adopt biosafety legislation, i.e. implement the requirements of the Cartagena Protocol	130,654	110,967	19,688	0	19,688
NBSAP	2	B.1-o1.5	Agrobiodiver- sity	Elaborate and adopt national guidelines for the management of grazing lands	176,823	48,573	128,250	0	128,250
NBSAP	0	B.1-o2.2	Forest	Improve the existing system of wood tracking to ensure timely detection of illegal logging	0	0	0	0	0
NBSAP	2	B.3-o1.1	Black Sea	Conduct a study on the causes and main sources of marine eutrophication	223,500	50,000	173,500	25,000	148,500

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NBSAP	3	B.3-o2.3	Agrobiodiver- sity	Conduct three restoration pilot projects in the most contaminated/degraded pastures and six pilot projects in the areas with the most contaminated/degraded soils in selected municipalities	1,905,520	1,696,253	209,267	209,267	0
NBSAP	2	B.3-o3.3	Inland Waters	Establish a system to assess the chemical state of inland water ecosystems	424,877	303,924	120,953	120,953	0
NBSAP	1	B.6-o1.2	Species and Habitat	Create a legal framework for sustainable hunting according to the national sustainable hunting strategy	112,205	72,830	39,375	0	39,375
NBSAP	1	C.1-o1.4	Species and Habitat	Revise the existing list of plant species that are important for conservation and introduce relevant changes to the National Red List	43,586	28,586	15,000	0	15,000
NBSAP	0	C.1-o1.5	Species and Habitat	Complete the identification of important plant areas	0	0	0	0	0
NBSAP	2	C.2-o1.17	Species and Habitat	Establish/strengthen artificial propagation and captive breeding programmes for rare and economically valuable plant and animal species.	82,850	32,850	50,000	0	50,000
NBSAP	0	C.2-o1.18	Species and Habitat	Ensure the conservation of at least 40% of critically endangered plant species through including them in ex situ collections.	0	0	0	0	0
NBSAP	1	C.2-o1.2	Species and Habitat	Revise the existing list of game species and set harvest quotas that are based on scientific data	375,000	0	375,000	0	375,000
NBSAP	0	C.2-o1.20	Species and Habitat	Upgrade existing seed banks so that they include at least 75% of threatened plant species and have seeds from at least 20% of those species readily available to supply species recovery programmes.	0	0	0	0	0

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NBSAP	1	C.3-o1.1	Forest	Develop a forest policy, strategy and action plan in a participatory manner	392,661	281,705	110,956	0	110,956
NBSAP	2	C.3-o2.3	Forest	Elaborate and implement an optimal system of forest categorization: identify category V (IUCN) ecological corridors and forests of High Conservation Value (HCV) and assign them a relevant status	11,934,500	16,500	11,918,000	9,300,000	2,618,000
NBSAP	1	C.4-o4.2	Species and Habitat	Develop the Emerald Network of Georgia	690,553	140,553	550,000	0	550,000
NBSAP	2	D.1-o1.1	Agrobiodiver- sity	Assess the institutional and financial implications of the ratification of the Nagoya Protocol; ratify the Protocol and adopt relevant legislation	18,602	14,852	3,750	0	3,750
NBSAP	2	D.2-o1.3	Species and Habitat	Conduct a feasibility assessment of the application of international mechanisms, suggested by UNFCCC (REDD+, international carbon market), in Georgia; this should be done in order to support biodiversity conservation.	141,522	70,272	71,250	0	71,250
NBSAP	0	E.1-o1.1	Species and Habitat	Classify Georgia's habitats using classification methodology recommended by the EU	74,318	74,318	0	0	0
NBSAP	1	E.1-o2.1	Forest	Conduct training and extension activities for biodiversity monitoring experts, foresters, wild fire fighters, wildlife managers, freshwater fishing specialists and protected areas personnel	531,102	81,102	450,000	0	450,000
NBSAP	1	E.1-o2.3	Protected Areas	Create databases for protected areas	66,000	0	66,000	66,000	0

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NBSAP	3	E.2-o1.1	Awareness	Develop national guidelines (topics and sources of information, teaching methodologies, a list of typical errors/misconceptions concerning biodiversity issues in the natural and social science textbooks) for teaching of biodiversity (including agrobiodiversity) and prepare recommendations for the National Teaching Plan	15,800	2,000	13,800	0	13,800
NBSAP	3	E.2-o1.2	Awareness	Increase the national capacity for ensuring the production and use of high quality textbooks; prepare education materials suitable for use at preschool institutions and schools	55,706	36,506	19,200	0	19,200
NBSAP	2	E.2-o1.4	Awareness	Support the establishment and functioning of eco- clubs in schools to promote teaching of biodiversity- related topics	726,593	726,593	0	0	0
NBSAP	1	B.2-o1.3	Species and Habitat	Develop a legal framework and strategy for the management of invasive alien species	168,750	0	168,750	0	168,750
NBSAP	1	C.2-o1.4	Species and Habitat	Implement the existing programme of goitered gazelle restoration in Georgia	1,529,251	979,251	550,000	250,000	300,000
NBSAP	-1	A.4-o3.3	Biosafety	Elaborate a list of national biosafety experts using special criteria and set minimum requirements	0	0	0	0	0
NBSAP	-1	C.3-o2.4	Forest	Assess the potential for the implementation of community forestry schemes; consider the role of women in the use of forest resources; implement pilot projects and support the replication of successful pilot projects	0	0	0	0	0

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NBSAP	3	A.3-o1.3	Cross-cutting	Conduct a review and modification of the current system of spatial planning to ensure the integration of biodiversity through both the mapping of biodiversity and ecosystem services and systemic conservation planning	239,137	77,365	161,772	94,928	66,844
NBSAP	2	A.2-o1.2	Awareness	Restore and promote (e.g. through the distribution of electronic copies in the districts of Georgia) the existing Clearing House Mechanism (CHM; www.chm.moe.gov.ge)	10,000	0	10,000	0	10,000
NBSAP	1	A.2-o1.3	Awareness	Create a web portal and a search feature for the regularly updated biosafety resources at the Clearing House Mechanism (CHM; www.chm.moe.gov.ge)	0	0	0	0	0
NBSAP	2	A.2-01.4	Awareness	Define the content of official statistical data about biodiversity (including agrobiodiversity) and biosafety; define the frequency of data collection; name the agencies responsible for data collection and strengthen their capacities	0	0	0	0	0
NBSAP	2	A.3-o2.1	Protected Areas	Conduct an economic valuation of the country's biodiversity and ecosystems using TEEB (The Economics of Ecosystems and Biodiversity), including agroecosystems (agricultural soils, natural grasslands and priority landraces)	2,730,000	383,000	2,347,000	0	2,347,000
NBSAP	0	A.3-o4.8	Agrobiodiver- sity	Improve the legal and institutional frameworks for the commercial use of nontimber plant resources	10,500	10,500	0	0	0
NBSAP	2	A.3-o5.2	Cross-cutting	Establish emission, discharge and water consumption norms with full regard to biodiversity conservation	37,500	0	37,500	0	37,500

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NBSAP	2	B.1-o2.3	Forest	Establish fast growing forest plantations in forest clearances so that timber and fuel wood can be produced and provided primarily to local communities	320,000	80,000	240,000	240,000	0
NBSAP	2	B.1-o2.9	Forest	Conduct assessments to identify forested areas that are affected by pests and pathogens	405,000	0	405,000	0	405,000
NBSAP	2	B.3-o3.4	Inland Waters	Conduct monitoring of inland water ecosystems within the framework of the national biodiversity monitoring system	186,234	61,274	124,960	56,800	68,160
NBSAP	3	B.4-o1.4	Agrobiodiver- sity	Elaborate a scheme for the integration of management methods related to agroecosystems and natural grasslands into regional strategic documents and municipal annual work plans	159,048	61,548	97,500	0	97,500
NBSAP	-1	B.4-o2.2	Agrobiodiver- sity	Implement pilot projects on organic farming in at least six municipalities, including high mountain regions	232,901	232,901	0	0	0
NBSAP	1	B.4-o3.2	Agrobiodiver- sity	Assess the status of pollinators and entomophagous insects and develop recommendations for their conservation	0	0	0	0	0
NBSAP	2	B.5-o1.5	Inland Waters	Assess commercial fish stocks in the country's inland waters	0	0	0	0	0
NBSAP	1	C.1-o2.1	Species and Habitat	Revise the national biodiversity monitoring strategy and action plan	109,885	109,885	0	0	0
NBSAP	1	C.1-o2.2	Species and Habitat	Create a comprehensive institutional framework for biodiversity monitoring and implement biodiversity monitoring	5,016	5,016	0	0	0

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NBSAP	1	C.2-o1.19	Species and Habitat	Develop and implement conservation management plans for the stands of wooded plants affected by diseases and other factors (chestnut, Colchis box, Imeretian oak, pine, zelkova and elm)	482,000	34,000	448,000	0	448,000
NBSAP	1	C.4-o5.3	Protected Areas	Identify and demarcate the borders of protected areas	449,988	379,588	70,400	70,400	0
NBSAP	1	C.4-o7.2	Protected Areas	Develop joint pilot projects (on tourism, monitoring, etc.) on transboundary cooperation between PAs	130,000	120,000	10,000	10,000	0
NBSAP	0	C.5-o2.4	Agrobiodiver- sity	Establish a gene bank of sperm/embryos of domestic animal breeds/landraces	0	0	0	0	0
NBSAP	0	C.6-o1.2	Black Sea	Define indicators to assess the health of Black sea ecosystem within the framework of the National Biodiversity Monitoring system	40,000	25,000	15,000	0	15,000
NBSAP	2	C.6-o1.7	Black Sea	Develop a conservation management plan for Black sea cetaceans	14,000	14,000	0	0	0
NBSAP	1	E.1-o2.2	Forest	Update the current forestry curricula at universities	26,827	26,827	0	0	0
NBSAP	0	E.1-o2.4	Protected Areas	Improve research and monitoring in protected areas	395,872	395,872	0	0	0
NBSAP	2	E.2-o1.7	Awareness	Promote the creation of educational "platforms" (e.g. clubs, workshops, temporary and permanent exhibitions) at permanent providers of informal biodiversity education, such as protected areas, museums, libraries and youth centres	853,133	613,133	240,000	0	240,000
NBSAP	0	E.3-o1.2	Agrobiodiver- sity	Integrate traditions and customs that are in line with sustainable use principles into the legislation	0	0	0	0	0
MENRP		38 01 01		Environmental policy elaboration, regulation and management	4,913,922	2,490,003	2,423,919	2,423,919	0

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MENRP		38 01 02		Measures related to EIAs	26,918	7,257	19,661	19,661	0
MENRP		38 01 02		Ensuring EIA expertise	2,269	2,269	0	0	0
MENRP		38 01 03		Environmental Awareness Measures	431,825	144,561	287,264	287,264	0
MENRP		38 01 04		Biodiversity Protection	294,319	12,095	282,224	282,224	0
MENRP		38 01 04		Biodiversity Monitoring (Animal monitoring)	176,054	176,054	0	0	0
MENRP		38 01 05		#N/A	0	0	0	0	0
MENRP		38 02		Environmental Supervision	20,699,480	10,666,638	10,032,842	10,032,842	0
MENRP		38 03 01		Agency of Protected Areas	30,779,945	12,496,330	18,283,616	18,283,616	0
MENRP		38 03 02		Protection of Pas and Resourse management	656,510	51,744	604,766	604,766	0
MENRP		38 03 02		State Programme on Firefighting and Combating Pests in PAs	87,421	87,421	0	0	0
MENRP		38 03 03		Ecotourism development, public outreach, eco-education and services to visitors	453,484	120,863	332,621	332,621	0
MENRP		38 03 04		Gochkadili Nature Monument infrastructure Development	111,970	111,970	0	0	0
MENRP		38 03 04		Okatse Canyon touristic infrastucture development	276,063	276,063	0	0	0
MENRP		38 03 04		Sataplia Reserve Infrasturcture Development	13,878	13,878	0	0	0
MENRP		38 07		National Environmental Agency	3,942,313	1,626,856	2,315,457	2,315,457	0
MENRP		38 04 01		National Forest Agency	52,442,197	22,637,819	29,804,379	29,804,379	0
MENRP		38 04 02		Forest protection-restoration activities	3,543,732	1,371,657	2,172,076	2,172,076	0
MENRP		38 04 03		Forest management activities	11,376,843	3,670,597	7,706,245	7,706,245	0
MENRP		38 04 04		Forest Inventory activities	2,480,298	805,097	1,675,201	1,675,201	0
MENRP		38 04 05		Firefighting activities	269,140	269,140	0	0	0
MENRP		38 05 01		National Nursery	4,336,245	1,851,868	2,484,377	2,484,377	0
MENRP		38 05 02		Development of Forestry System	20,330	20,330	0	0	0
MENRP		38 05 02		Renewal of the red list species	1,288,552	679,755	608,797	608,797	0

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MENRP		38 06 01		Environmental Eduacation and Information Centre	3,989,121	2,793,758	1,195,363	1,195,363	0
MENRP		38 06 02		Development of environmental software (system)	185,590	94,021	91,569	91,569	0
MENRP		38 07		Nuclear and radioactive safety	152,348	40,467	111,882	111,882	0
MENRP		38 03 04		Development of Protected Areas System	2,617,153	1,726,939	890,215	890,215	0
MENRP		38 03 04		Development of Protected Areas System	(1,321,664)	(1,321,664)	0	0	0
MENRP		38 03 05		Envionment Protection Programme – south caucasus – establishment of Javakheti National Park (KFW)	2,197,113	2,197,113	0	0	0
MENRP		38 03 05		Support to Pas in Caucasus, Georgia (Ecoregional Programme Georgia, KFW)	6,169,772	5,151,750	1,018,022	1,018,022	0
Municipalities				Forestry sector	1,472,451	803,873	668,578	668,578	0
Municipalities				Fishing and Hunting	0	0	0	0	0
Municipalities				Waste management	0	0	0	0	0
Municipalities				Wastewater management	0	0	0	0	0
Municipalities				Avoiding environmental pollution	94,916	66,937	27,979	27,979	О
Municipalities				Protection of biodiversity and landscapes	2,600,482	1,696,226	904,256	904,256	0
Municipalities				Scientific research in environmental protection	0	0	0	0	0
Municipalities				Unclassified activities in environmental protection	0	0	0	0	0
Non-NBSAP				POPs pesticides localization	99,100	99,100	0	0	0
Non-NBSAP				Third national communication to UNFCCC	40,000	40,000	0	0	0
Non-NBSAP				Administration of Pas network	22,578	22,578	0	0	0
Non-NBSAP				Biomass production and utilization	227,169	227,169	0	0	0
Non-NBSAP				Clean-up Georgia Phase II and III	62,999	53,157	9,842	9,842	0

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Non-NBSAP				Integrated Management of Natural Resources in Watersheds	0	0	0	0	0
Non-NBSAP				LEDS	120,000	120,000	0	0	0
Non-NBSAP				Pas reform support	640,000	640,000	0	0	0
Non-NBSAP				Identification and Implementation of Adaptation Response to Climate Change Impact for Conservation and Sustainable Use of Agro-diversity in Arid and Semi-arid Ecosystems of South Caucasus (three countries)	156,095	156,095	0	0	0
Non-NBSAP				Sustainable agriculture and responsible attitude to environment	354,000	354,000	0	0	0
Non-NBSAP				Small Eco-Tourism Infrastructure Development in Tusheti Pas	86,387	86,387	0	0	0
Non-NBSAP				Flood and flash-flood management in Rioni river basin	190,000	190,000	0	0	0
Non-NBSAP				Research on Cumulative impact of HPPs	58,937	58,937	0	0	0
Non-NBSAP				Waste Management Technologies in Regions	238,964	225,000	13,964	13,964	0
Non-NBSAP				Support to traditional farming in Tusheti	85,546	85,546	0	0	0
Non-NBSAP				Monitoring and development of Imereti Caves	172,775	172,775	0	0	0
Non-NBSAP				Tourist trail in Tbilisi NP	3,697	3,697	0	0	0
Non-NBSAP				Preparation of UNCCD NAP	7,500	7,500	0	0	0
Non-NBSAP				Aarhus Centres in South Caucasus	19,266	19,266	0	0	0
Non-NBSAP				Improvement of monitoring in Black Sea (EMBLAS)	88,333	88,333	0	0	0
Non-NBSAP				Conservation and Sustainable Utilization of Endangered Domestic Animal Breeds of Georgia	10,968	10,968	0	0	0

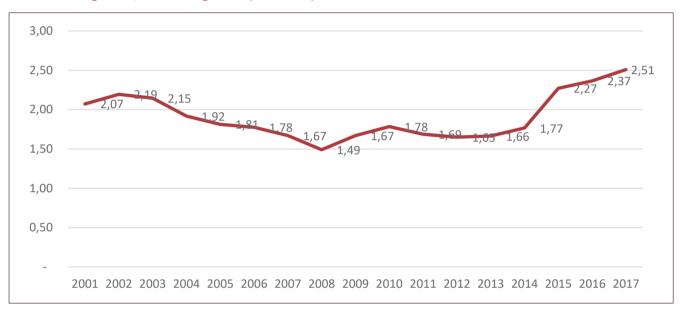
Category	Priority	Action #	Thematic Group (1)	Description of action	Value of action (USD)	Spent (USD)	Remaining amount to spend (USD)	(Among them) Already allocated (Amount)	GAP (USD)
Non-NBSAP				Conservation and Sustainable Utilization of Endangered Domestic Animal Breeds of Georgia	38,472	38,472	0	0	0
Non-NBSAP				Fairtrade & organic hazelnut value chain development for smallholder farmers in Georgia	0	0	0	0	0
Non-NBSAP				Fuel wood surveys	40,516	40,516	0	0	0
Non-NBSAP				Ajara protected areas sustainable tourism development strategy and action plan	2,730	2,730	0	0	0
Non-NBSAP				Tourism development support projects in Machakhela	2,358	2,358	0	0	0
Non-NBSAP				Ajara PAs Ecosystems' surveys valuation and options for income generation	927	927	0	0	0
Non-NBSAP				Machakhela administration reconstruction works	60,003	60,003	0	0	0
Non-NBSAP				GEF Small Grants Programme	1,040	1,040	0	0	0
Non-NBSAP				GEF Small Grants Programme	17,442	17,442	0	0	0
Non-NBSAP				GEF Small Grants Programme	9,405	9,405	0	0	0
Non-NBSAP				GEF Small Grants Programme	22,662	22,662	0	0	0
Non-NBSAP				GEF Small Grants Programme	7,611	7,611	0	0	0
Non-NBSAP				GEF Small Grants Programme	20,995	20,995	0	0	0
Non-NBSAP				GEF Small Grants Programme	39,716	39,716	0	0	0
Non-NBSAP				2012 Protected Areas Program	0	0	0	0	0
Non-NBSAP				Support to WWF Caucasus Programme Office Capacity Building	0	0	0	0	0
Non-NBSAP				Promoting sustainable dam development at river- basin-scale in the Southern Caucasus (pilot phaze)	23,043	23,043	0	0	0

Category	Priority	Action #	Thematic Group (1)	Description of action	Value of action (USD)	Spent (USD)	Remaining amount to spend (USD)	(Among them) Already allocated (Amount)	GAP (USD)
Non-NBSAP				Advise to governments in the development of strategies to protect freshwater ecosystems in the South Caucasus	57,712	57,712	0	0	0
Non-NBSAP				"Phaing -In" year of Organizational Development Support for WWF Caucasus	0	0	0	0	0
Non-NBSAP				Advocating for better environmental governance in Georgia	0	0	0	0	0
Non-NBSAP				Empowering local communities in Imereti and Racha-Lechkhumi	4,092	4,092	0	0	0
Non-NBSAP				Strengthening civil society participation in ENP process	4,248	4,248	0	0	0
Non-NBSAP				Improving land governance to foster sustainable agriculture development in Georgia	10,859	10,859	0	0	0
Non-NBSAP				Hydro Power and Energy planning Project	7,500	7,500	0	0	0
Non-NBSAP				Challenges of European integration – for better Environmental Governance	7,275	7,275	0	0	0
Non-NBSAP				Generating economic and environmental benefits from sustainable land management for vulnerable rural communities of Georgia	50,000	0	50,000	50,000	0
Non-NBSAP				RBSAP	553,482	409,541	143,942	143,942	0
Non-NBSAP				South Caucasus Regional Platform on Biodiversity and Ecosystem Services	16,509	16,509	0	0	0
Non-NBSAP				SPPA	525,543	346,429	179,114	179,114	0
Non-NBSAP				Catalyzing Financial Sustainability of Georgia's Protected Areas System	0	0	0	0	0
Non-NBSAP				Development of nature based tourism in Georgian PAs	28,827	28,827	0	0	0
Non-NBSAP				SGP Operational Plan 6 (OP6)	16,545	16,545	0	0	0
Non-NBSAP				EMBLAS 2	304,267	257,119	47,148	47,148	0

Category	Priority	Action #	Thematic Group (1)	Description of action	Value of action (USD)	Spent (USD)	Remaining amount to spend (USD)	(Among them) Already allocated (Amount)	GAP (USD)
Non-NBSAP				Training of local authorities in Adjara, Samegrelo-Upper Svaneti, Kakheti and Tbilisi for forest governance decentralization	430,371	319,415	110,956	110,956	0
Other Ministries				Scientific research in agriculture	12,023,916	5,677,975	6,345,942	6,345,942	0
Other Ministries				Food security, plant protection and epizootic safety	12,283,721	5,700,421	6,583,300	6,583,300	0
Other Ministries				Shore protection works on coastal lines	2,159,498	852,026	1,307,472	1,307,472	0
Ministry Salary				Need for additional total annual salary of Biodiversity and Forest Policy Department	624,000	0	624,000	0	624,000
Ministry Equipment				Need for additional equipment of Biodiversity and forest policy department	10,000	0	10,000	0	10,000
Ministry Trainings				Needs for total annual training expense of Biodiversity and forest policy department	48,000	0	48,000	0	48,000
Ministry Salary				Need for additional total annual salary of DES	12,360,000	0	12,360,000	0	12,360,000
Ministry Equipment				Need for additional equipment of DES	330,725	0	330,725	0	330,725
Ministry Trainings				Needs for total annual training expense of DES	144,000	0	144,000	0	144,000
Ministry Salary				Need for additional total annual salary of APA	6,395,136	0	6,395,136	0	6,395,136
Ministry Equipment				Need for additional equipment of APA	241,300	0	241,300	0	241,300
Ministry Trainings				Needs for total annual training expense of APA	661,500	0	661,500	0	661,500
Ministry Salary				Need for additional total annual salary of NFA	3,910,287	0	3,910,287	0	3,910,287
Ministry Equipment				Need for additional equipment of NFA	194,008	0	194,008	0	194,008
Ministry Trainings				Needs for total annual training expense of NFA	284,500	0	284,500	0	284,500
Small HPPs				HPPs Spending (Small Size)	14,767,094	2,237,701	12,529,392	5,011,757	7,517,635
Medium HPPs				HPPs Spending (Medium Size)	26,641,263	2,764,656	23,876,607	8,356,813	15,519,795

Category	Priority	Action #	Thematic Group (1)	Description of action	Value of action (USD)	Spent (USD)	Remaining amount to spend (USD)	(Among them) Already allocated (Amount)	GAP (USD)
Large HPPs				HPPs Spending (Large Size)	13,742,385	1,192,281	12,550,104	3,765,031	8,785,073
Mining				Mining activities		0	25,740,000	0	25,740,000

Annex 9. Average USD/GEL exchange rates (2001-2017)







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