



# GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Medium-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

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## PART I: Project Information

Project Title:	Upscaling of Global Forest Watch in Caucasus Region		
Country(ies):	Armenia, Azerbaijan, Georgia	GEF Project ID: <sup>1</sup>	
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01660
Other Executing Partner(s):	World Resources Institute <sup>2</sup>	Submission Date:	April 20, 2018
GEF Focal Area(s):	Biodiversity	Project Duration (Months)	36
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP	<input type="checkbox"/>
Name of parent program:	N/A	Agency Fee (\$)	92,396

## A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES<sup>3</sup>

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
BD-4 Program 9	GEFTF	972,604	3,460,000
<b>Total Project Cost</b>		<b>972,604</b>	<b>3,460,000</b>

## B. INDICATIVE PROJECT DESCRIPTION SUMMARY

**Project Objective:** Empower decision-makers in government and civil society with technology and information to help reduce deforestation, facilitate commitments to restoration and conserve forest biodiversity by developing innovative user-friendly tools that easily share information, provide on-the-fly analyses.

Project Components	Financing Type <sup>4</sup>	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Catalyze better land-use decision making through access to reliable up-to-date information	TA	1.1 Enable improved management of forests and conservation of biodiversity by providing information to support sustainable land-use management and support forest landscape restoration, planning and implementation in <b>Armenia</b>  <i>Indicators: (i) At least two use cases of GFW tools and knowledge products to influence decision-making documented</i> <i>(ii) Number of hectares identified for potential</i>	1.1.1 Stakeholder mapping and analysis, including identification and inventory of available forest, land use and biodiversity data in Armenia  1.1.2. Creation of an interactive forest and land use portal for Armenia  1.1.3 Development of ready-to-use analyses for better land use decisions and to more easily share information in Armenia	GEFTF	308,763	1,000,000

<sup>1</sup> Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

<sup>2</sup> The World Resources Institute will execute the in country activities in collaboration with the REC Caucasus, the Ministry of Nature Protection of the Republic of Armenia (the Environmental Projects Implementation Unit), the Ministry of Ecology and Natural Resources of Azerbaijan Republic, the Ministry of Environment Protection and Agriculture of Georgia

<sup>3</sup> When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

<sup>4</sup> Financing type can be either investment or technical assistance.

		<p><i>restoration opportunities</i></p> <p>1.2 Enable improved management of forests and conservation of biodiversity by providing information to support sustainable land-use management and support forest landscape restoration, planning and implementation in <b>Azerbaijan</b></p> <p><i>Indicators: (i) At least two use cases of GFW tools and knowledge products to influence decision-making documented</i>  <i>(ii) Number of hectares identified for potential restoration opportunities</i></p>	<p>1.1.4 Restoration Opportunity Mapping that quantifies the area of opportunity in Armenia based on the best knowledge and science developed, tested and applied</p> <p>1.1.5. Development of a draft policy instrument necessary for making forest restoration and forest related land-use planning</p> <p>1.1.6 Development of a feasibility study on restoration implementation for 1 target area</p> <p>1.2.1 Stakeholder mapping and analysis, including identification and inventory of available forest, land use and biodiversity data in Azerbaijan</p> <p>1.2.2 Creation of an interactive forest and land use portal for Azerbaijan</p> <p>1.2.3 Development of ready-to-use analyses for better land use decisions and to more easily share information in Azerbaijan</p> <p>1.2.4 A Restoration Opportunity Mapping that quantifies the area of opportunity in Azerbaijan based on the best knowledge and science developed, tested and applied</p> <p>1.2.4. Development of a draft policy instrument necessary for making forest restoration and forest related land-use planning</p> <p>1.2.6 Development of a feasibility study on</p>	GEFTF	321,114	1,000,000
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		<p>1.3 Enable improved forest landscape restoration, planning and implementation in <b>Georgia</b></p> <p><i>Indicator: (i) Number of hectares identified for potential restoration opportunities</i></p>	<p>restoration implementation for 1 target area</p> <p>1.3.1 A Restoration Opportunity Mapping that quantifies the area of opportunity in Georgia based on the best knowledge and science developed, tested and applied</p>	GEFTF	31,723	200,000
2. Increased capacity of key actors and institutions to apply up-to-date information to land-use decisions	TA	<p><b>2.1 Stakeholders in Armenia</b> capacitated to apply GFW to land use decisions by participation in exchanges and training programs</p> <p><i>Indicator (i) Total users and quality of user engagement with GFW tools, disaggregated by category (pulled from website analytics)</i></p>	<p>2.1.1 Creation of multi-sectoral working groups to drive the direction of the project</p> <p>2.1.2 Training and outreach on use of the portal and restoration opportunities map for government, NGOs, academia, and other civil society organizations</p>	GEFTF	114,200	500,000
		<p><b>2.2 Stakeholders in Azerbaijan</b> capacitated to apply GFW to land use decisions by participation in exchanges and training programs</p> <p><i>Indicator (i) Total users and quality of user engagement with GFW tools, disaggregated by category (pulled from website analytics)</i></p>	<p>2.2.1 Creation of multi-sectoral working groups to drive the direction of the project</p> <p>2.2.2 Training and outreach on use of the portal and restoration opportunities map for government, NGOs, academia, and other civil society organizations</p>	GEFTF	118,768	500,000
		<p><b>2.3 Stakeholders in Georgia</b> capacitated to apply GFW to land use decisions by participation in exchanges and training programs</p> <p><i>Indicator (i) Total users and quality of user engagement with GFW tools, disaggregated by category (pulled from website analytics)</i></p>	<p>2.3.1 Creation of multi-sectoral working groups to drive the direction of the project</p> <p>2.3.2 Training and outreach on use of the portal and restoration opportunities map for government, NGOs, academia, and other civil society organizations</p>	GEFTF	31,722	160,000

	Subtotal		926,290	3,360,000
	Project Management Cost (PMC) <sup>5</sup>	GEFTF	46,314	100,000
	<b>Total Project Cost</b>		<b>972,604</b>	<b>3,460,000</b>

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: (N/A)

**C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE**

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government	Ministry of Nature Protection of the Republic of Armenia	In-kind	1,000,000
Recipient Government	Ministry of Ecology and Natural Resources of Azerbaijan Republic	In-kind	1,000,000
Recipient Government	Ministry of Environment Protection and Agriculture of Georgia	In-kind	160,000
CSO	World Resources Institute	Grant	1,000,000
CSO	REC Caucasus	Grant	300,000
<b>Total Co-financing</b>			<b>3,460,000</b>

**D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS <sup>a)</sup>**

GEF Agency	Trust Fund	Country/Regional/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) <sup>b)</sup>	Total (c)=a+b
UNEP	GEFTF	Armenia	Biodiversity		444,111	42,190	486,301
UNEP	GEFTF	Azerbaijan	Biodiversity		461,876	43,878	505,754
UNEP	GEFTF	Georgia	Biodiversity		66,617	6,328	72,945
<b>Total GEF Resources</b>					<b>972,604</b>	<b>92,396</b>	<b>1,065,000</b>

a) Refer to the [Fee Policy for GEF Partner Agencies](#).

**E. PROJECT PREPARATION GRANT (PPG)<sup>6</sup>**

Is Project Preparation Grant requested? Yes  No  If no, skip item E.

**PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS**

Project Preparation Grant amount requested: \$27,399					PPG Agency Fee: 2,601		
GEF Agency	Trust Fund	Country/Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee <sup>7</sup> (b)	Total c = a + b
UNEP	GEF TF	Armenia	Biodiversity		12,511	1,188	13,699
UNEP	GEF TF	Azerbaijan	Biodiversity		13,011	1,235	14,246
UNEP	GEF TF	Georgia	Biodiversity		1,877	178	2,055
<b>Total PPG Amount</b>					<b>27,399</b>	<b>2,601</b>	<b>30,000</b>

**F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS<sup>8</sup>**

Provide the expected project targets as appropriate.

<sup>5</sup> For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

<sup>6</sup> PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

<sup>7</sup> PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

<sup>8</sup> Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of forested landscapes covering 300 million hectares	<i>Improved management of forested landscapes covering 1.7 million hectares in Armenia, Azerbaijan and Georgia Hectares</i>

## **PART II: PROJECT JUSTIFICATION**

1. *Project Description*. Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area<sup>9</sup> strategies, with a brief description of expected outcomes and components of the project, 4) [incremental/additional cost reasoning](#) and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

### **1.1 THE GLOBAL ENVIRONMENTAL PROBLEMS, ROOT CAUSES AND BARRIERS THAT NEED TO BE ADDRESSED**

#### **Overview and Scope**

Maintaining and expanding forest cover in the South Caucasus countries are critical aspects in supporting human livelihoods, economies, carbon storage, water management and storehouses of biodiversity. The forests of the South Caucasus countries (Armenia, Azerbaijan and Georgia) lie within the Caucasus Eco-region (see Figure 1), one of the Global 200 eco-regions. Extending to about three million hectares - forests are the most important biome for biodiversity conservation in the South Caucasus, harboring many endemic and relic species of woody plants and herbs, and providing habitats for globally rare and endangered animals. In addition to their high value to wildlife conservation, the forests of the South Caucasus make an important contribution to national sustainable development goals. Forests provide sustenance and livelihoods for rural people and essential environmental services such as preventing avalanches and soil erosion and regulating the quantity and quality of water supplies. These values are threatened by unsustainable management and exploitation, which if continued will lead to irreversible loss of biodiversity and of the products and services on which many people depend. Despite these extraordinary, and in many cases, irreplaceable values, forest degradation continues. The South Caucasus countries - Armenia, Azerbaijan, and Georgia, have experienced substantial levels of deforestation and degradation in the last 20 years, resulting in soil degradation, landslides and other natural hazards. Forest and land degradation present a few problems and challenges in each of the South Caucasus countries, with significant and direct impacts on rural poverty, household food security, biodiversity, resilience to extreme weather, quantities of carbon sequestered and land use values.

Reliable up-to-date data on the extent and state of forests in the three South Caucasus countries does not exist. Inventory for most forests is mainly out of date.



**Figure 1 - Distribution of forests in the Caucasus Eco-region (including Armenia, Azerbaijan and Georgia)<sup>1</sup>**

<sup>9</sup> For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

Biodiversity value of the Forests of South Caucasus<sup>10</sup>: Most of the region's rare and endangered animal species are associated with forest ecosystems and depend on ecologically intact forest, such as most bat species, brown bear (*Ursis arctos*; LC), wild goat (Caucases Tur, *Capra caucasica*, EN) chamois (*Rupicapra rupicapra*, LC), Caucasian red deer (*Capreolus elaphus*, LC), European bison (*Bison bonasus*, VU), two endemic species of salamanders, and the Caucasian leopard (*Panthera pardus*, EN). Most endemic invertebrates, such as Caucasian running beetle (*Carabus caucasicus*, NE) and Beech snail (*Helix buchi*, NE), are also strictly associated with forest ecosystems. Forests provide the leaves, nuts and roots on which roe deer and wild boar feed. West- and east-Caucasian turkeys and the Caucasian black grouse (*Tetra mlokosiewiczii*, NE) - species that live in the sub-alpine belt - use mountain forests as wintering habitats. Caucasian populations of European wild cat (*Felis silvestris*, LC) and pine marten (*Martes martes*, LC) are relatively abundant and conservation of these populations is important for conservation of these species world-wide. The Colchic forests (Georgia) and Talysh forests (Azerbaijan) are examples of unique forest systems in the region that are largely isolated from other large forest massifs in Europe and Central Asia and contain most of region's endemic species, such as the Caucasian adder (*Vipera kaznakovi*, EN), Caucasian mud-diver (*Pelodytes caucasicus*, NT) and Caucasian toad (*Bufo verrucosissimus*, NT), several endemic rodents including Robert's snow vole (*Chionomys roberti*, LC), Caucasian mole (*Talpa caucasica*, LC) and Shelkownikow's water shrew (*Neomys shelkownikowi*, NE). South Caucasus forests are also rich in bird species, harboring eagle owls, seven species of woodpeckers and serving as a migration corridors and breeding grounds for a large number of bird populations.

Economy and livelihoods: Forests provide a variety of goods and services and are a source of livelihoods for thousands of rural people. In many rural areas and some towns, fuel wood is the primary source of energy for heating and cooking. Some rural households consume as much as 15 cubic meters of fuel wood annually. The region's forests are also an important source of industrial wood for domestic markets, in particular construction and furniture, and Georgia supplies substantial quantities to international markets. However, precise figures are not available because actual removals are not always recorded accurately. Non-wood forest products including nuts, berries, mushrooms and medicinal plants are important direct sources of well-being for rural people, and together with tree seeds, are important sources of income for rural economies (e.g. *Abies nordmanniana* seeds from Georgia). Forests are also used by rural people for grazing of cattle, goats, sheep and pigs. Hunting and game management provide some income to state budgets, and tourism and recreation provide income to local economies. Lastly, forests provide environmental services such as watershed protection and soil erosion prevention, which make a substantial invisible contribution to the rural and national economies of the region.

### **Threats to Biodiversity in the Forests of South Caucasus:**

The region's forests and its associated biodiversity are threatened by unsustainable logging, unsustainable grazing and neglectful or environmentally harmful forest management practices. Careless clear-cutting of mountain beech stands has permanently damaged a significant portion of valuable beech forests. Oak forests, historically largely cleared for farmlands and pastures, have been spared mostly only in remote canyons and on relatively poor soils. Chestnut forests in the Colchic foothills and in the northwestern Caucasus have also been logged intensively. Very few lowland forests have been preserved to this day; some stands remain only in the Lenkoran and Kolkheti lowlands and in the Kura, Iori, Samur and Alazani-Agrichay river valleys, which are in Azerbaijan and Georgia.

Unsustainable logging: Two main types of unsustainable logging can be distinguished based on their underlying causes and the actors involved: unsustainable logging of industrial timber for processing and sale into domestic and international markets; and unsustainable cutting of trees for fuel-wood by or for rural people who have no affordable alternative. Some unsustainable logging may often be legal, like when or example, the selection of stands for logging does not take conservation value into consideration. Impacts of unsustainable logging on conservation value include: long term change in stand structure due to over-harvesting of valuable mature trees for industrial wood; gradual opening of forest margins leading to permanent loss of forest and reduction in conservation and other environmental services; and damage to remaining trees, soil and water as a result of bad harvesting practices.

Unsustainable grazing: Grazing levels in forests around settlements are, in many instances, far above carrying capacity. Overgrazing prevents regeneration of herb, shrub and tree layers and causes permanent damage to soils. Lack of regeneration and the gradual disappearance of protective vegetation leads to soil erosion, landslides and forest habitat loss.

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<sup>10</sup> Ecoregion Conservation Plan for the Caucasus (2012) [http://d2ouvy59p0dg6k.cloudfront.net/downloads/ecp\\_2012.pdf](http://d2ouvy59p0dg6k.cloudfront.net/downloads/ecp_2012.pdf)

*Neglectful/harmful forestry practices:* Poorly planned and executed logging operations that use inappropriate machinery reduce the conservation value of forests by causing damage to the remaining trees, herb and shrub layers and soil. Potential environmental impacts of logging operations are not always identified and steps are often not taken to avoid or mitigate damaging impacts.

Between 1990 and 2005, Armenia lost significant part of its forest cover due to illegally harvested timber for both fuel and commercial purposes.<sup>11</sup> In addition, mining, a key economic activity in Armenia, is worsening forest degradation as in some instances is being carried out in forested areas. Mining is resulting in forest fragmentation, in addition to other causes such as land cultivation, logging, and infrastructure development. In Azerbaijan, forested areas cover almost 12% of the country, although in the 19<sup>th</sup> century forest cover was closer to 35%.<sup>12</sup> Azerbaijan is considered one of the world's most important countries for oil exploration, with most of the country rich in oil and natural gas, although pollution and contamination from oil production and transport has caused some environmental degradation and threatens the country's biodiversity. Azerbaijan is also the largest agricultural basin in the region with agricultural land covering more than half the country, although this has resulted in salinization due to substandard irrigation and drainage systems, and unsustainable levels of ground water extraction. Poor agricultural practices have also resulted in soil erosion from overstocking of livestock and ongoing deforestation for shifting land-use, which is also causing fragmentation of forests. Furthermore, forests in Azerbaijan are being fragmented due to the illegal harvesting of valuable timber species, particularly within the Talysh mountains.<sup>13</sup> Even though Georgia is rich in forest resources and there has been almost no change in the extent of forest coverage since 1990<sup>14</sup>, there are notable signs of forest degradation. Core drivers of forest degradation are unsustainable logging, unsustainable grazing and neglectful or environmentally harmful forest management practices<sup>15</sup>. During the last decade, numerous studies were carried out for Georgia by various organizations providing significant information about the degree of forest degradation caused by weak forest governance and a high volume of illegal activities in the forestry sector. In Georgia, during the last decade, numerous studies were carried out by various organizations providing significant information about the degree of forest degradation caused by weak forest governance and a high volume of illegal activities in the forestry sector. Recent reliable data provided by the inventories conducted in Borjomi-Bakuriani and Kharagauli forest districts (around 90,000 ha) from 2014 - 2015 showed a substantial decrease of timber resources and a high level of forest degradation since 1998, resulting in emissions of up to 2 million tons of CO<sub>2</sub>. It might be premature to draw conclusions on the state of Georgia's forests on the results obtained from two forest districts, but it is reasonable to expect results may be similar in other forest districts. Over the last two decades, illegal logging has been a problem in Georgia. According to official statistics, the volume of illegal logging was 8,262 m<sup>3</sup> in 2008 and increased to 20,994 m<sup>3</sup> in 2014. Illegal operations range from commercial extraction of highly valuable timber to fuel-wood cutting for both local and foreign markets.

For the South Caucasus countries, further degradation could cause a sharp decline in protection functions and self-restoration ability, which in the medium to long term could lead to irreversible degradation of forest ecosystems. Major natural hazards (floods, flash floods, landslides, mudflows, snow avalanches etc.) some of which may be exacerbated by forest degradation and deforestation—impact the national economies, with resulting damage to land, buildings, roads, other infrastructure, human health and the environment. In addition, unsustainable exploration of mineral resources can cause disruption and fragmentation to forest landscapes, resulting in forest degradation. The above factors are causing, or otherwise enabling, habitat destruction, deforestation, fragmentation and extensive, unregulated exploitation of fauna and flora. In fact, most natural old growth forests in the South Caucasus have been fragmented by logging, commercial plantations, agricultural lands and infrastructure, threatening the habitats of the region's rich biodiversity, isolating flora and fauna species populations, and disturbing migration routes.<sup>16</sup> All of these pressures are causing not only degradation

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<sup>11</sup> *Armenia Forest Statistics*, Mongabay, <https://rainforests.mongabay.com/deforestation/archive/Armenia.htm>

<sup>12</sup> *Forest Dependency in Rural Azerbaijan* (2014) ENPI East FLEG. [http://www.enpi-fleg.org/site/assets/files/1910/forest\\_dependency\\_azerbaijan.pdf](http://www.enpi-fleg.org/site/assets/files/1910/forest_dependency_azerbaijan.pdf)

<sup>13</sup> *The Republic of Azerbaijan's Fifth National Report to the Convention on Biological Diversity* (2014) <https://www.cbd.int/doc/world/az/az-nr-05-en.pdf>

<sup>14</sup> *Environmental Performance Review - Georgia* (2016) / Third Review // Environmental Performance Reviews Series No. 31, ECE/CEP/177, United Nations, New York and Geneva, 2016. [http://www.unecce.org/fileadmin/DAM/env/epr/epr\\_studies/ECE\\_CEP\\_177.pdf](http://www.unecce.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_177.pdf)

<sup>15</sup> *National Environmental Action Programme of Georgia for 2012 – 2016* (2012) / Chapter 7 - Forestry // Approved by the Government of Georgia - Ordinance #127 of January 24, 2012. [https://www.preventionweb.net/files/28719\\_neap2.eng.pdf](https://www.preventionweb.net/files/28719_neap2.eng.pdf)

<sup>16</sup> *Caucasus Biodiversity Council, Ecoregion Conservation Plan for the Caucasus* (2012) [http://d2ouvy59p0dg6k.cloudfront.net/downloads/ecp\\_2012.pdf](http://d2ouvy59p0dg6k.cloudfront.net/downloads/ecp_2012.pdf)

of forest ecosystems in the South Caucasus, but also fragmentation of forests and consequently fragmentation of forest dependent habitats. Forest fragmentation is serious problem in Armenia mainly due to mining activities on forest lands<sup>17</sup>, and in Georgia due to grazing and other agricultural activities<sup>18</sup> within forests. Extrapolating forest fragmentation trend into the future without appropriate measures will be effected in decline and disappearance of species associated with forests, decline in timber in terms of quantity and quality, specific decline of fuel wood and secondary non-wood forest products, increased risk of soil erosion, flooding, landslides, avalanches and the general increases in the magnitude of such events which will further lead to increased carbon emissions - degrading the opportunities and quality of life especially in rural areas.

### **Barriers**

The logic of GFW is based on the fundamental conclusion that an absence of timely, widely available and accurate forest data and information are a critical barrier to enhanced forest management. The long-term solution sought by the project is to empower decision-makers in government, and civil society with technology and information to reduce deforestation, facilitate commitments to restoration and conserve forest biodiversity. However, the following barriers are preventing this solution.

*Barrier 1: Insufficient land-use management practices because of limited access to reliable up-to-date information:*

Substantial data and information gaps constitute important barriers standing in the way of better management of the region's forests. Updated data does not exist for the many of the South Caucasus forests. It is difficult to reveal changes in species habitats and assess actual conditions and trends of biodiversity, so that there are no effective mechanisms for data collection, storing and analysis. Systematic collection of baseline information on forests, which is necessary for planning and decision-making on forest use, and which is essential for continuous long-term monitoring of forest change dynamics, requires significant resources and there is currently no system or platform for consolidating forest-related data and information generated within the responsible agencies or gathered by activities implemented and funded by international and multilateral donors. Practically, there is also no system for facilitating data sharing between state agencies or for enabling easy public access to forest-related information. While the existing Global Forest Watch (GFW) web based site is already useful for many purposes in the South Caucasus, barriers related to language, lack of national ownership, lack of integration of national data layers and insufficiently high resolution, make the existing site less valuable than it could be. To ensure sustainability of the efforts to improve data and information, and ensure that these data are regularly updated and used in planning and decision-making, there is need to create national data portals, which would be managed and regularly updated by a responsible national agency in each South Caucasus country. Decision makers are not fully aware of role that forest restoration can play in rural development, mitigation of climate change and the achievement of other important sustainable development outcomes like protection/conservation of forest biodiversity. They are not yet convinced that the anticipated benefits of restoration would outweigh the presumed costs. The lack of accurate and detailed information regarding (i) the status of the forest lands (e.g. in Georgia), (ii) the current land use and (iii) the needs and potential for improving forest management prevents the emplacing of critical "enabling conditions" to favour the spread of restoration across large areas. Due to various combinations of the above factors, successful restoration has not yet occurred at a large scale and has not had the impact it can and should have, except in case of Azerbaijan, where medium scale restoration (mainly afforestation) works have been increasing progressively since last decade.

*Barrier 2: Inadequate capacity of key actors and institutions to apply up-to-date information to land-use decisions:*

Lack of knowledge at all levels about modern restoration planning and implementation technologies and opportunities contributes to low levels of investment in actions that could boost the productivity of the land. Lack of knowledge can have profound effects across multiple areas, including: management of community forests; protected area management; forest carbon management and accounting, including REDD+; watershed management, and integrated land use management and planning. In addition to the shortage of qualified staff, there is need for expertise and methodologies to understand degradation and restoration opportunities and how it would increase biodiversity. There is also a lack of expertise in applying GIS and remote sensing data, such as aerial and satellite information, as a tool to support field work. Knowledge and skills in interpretation and analysis of remote sensing data are necessary not only for the staff of responsible agencies, but also for civil society organizations undertaking independent forest monitoring or other forest-related activities.

## **1.2) THE BASELINE SCENARIO AND ANY ASSOCIATED BASELINE PROJECTS**

<sup>17</sup> Strategy and National Action Plan of the Republic of Armenia on Conservation, Protection, Reproduction and Use of Biological Diversity for 2016-2020 (2015) // Approved at the Session of the Government of the Republic of Armenia No.54-10 on 10 December 2015.

<https://www.cbd.int/doc/world/am/am-nbsap-v2-en.pdf>

<sup>18</sup> National Biodiversity Strategy and Action Plan of Georgia 2014 – 2020 (2014) // Approved by the Government of Georgia - Decree No.343, of 8 May, 2014 "On adoption of the National Biodiversity Strategy and Action Plan, 2014–2020".

<https://www.cbd.int/doc/world/ge/ge-nbsap-v2-en.pdf>

## **Government Baseline – National**

### **Baseline template**

The proposed regional project will build upon the preliminary steps already taken by the Project Countries towards the sustainable management of forests. The South Caucasus countries recognize the threats and barriers and are making efforts to mitigate them although the efforts tend to be fragmented and un-coordinated, both within countries. While projects exist that are addressing the threats and barriers described above, under the business-as-usual scenario, these projects are insufficient to facilitate change that allows for improved access to information to combat threats to biodiversity including better forest and land management, deforestation, and restoration opportunities. The national forestry organizations of the South Caucasus countries are not organized in the same way but there are some common challenges that have influenced how forest information systems are used to reduce deforestation, facilitate commitments to restoration and conserve forest biodiversity. All three South Caucasus countries have shown clear drive to improve their forest management information systems by moving forward with a number of baseline activities, including their acceptance and implementation of relevant international agreements and adoption of related policies and laws, including the NEAPs, INDCs, NBSAPs, NAPs To UNCCD, FNCs of UNFCCC, and new national forest policies. All three governments are gradually increasing state funding for sustainable forest management.

In Armenia, land resources management is implemented by the Ministry of Nature Protection, which is responsible for policy development and implementation in the areas of environmental protection and sustainable use of natural resources, and Ministry of Agriculture, which is responsible for implementing policies in agriculture, forestry and food provision. Other forest organizations working in Armenia include State Forest Monitoring Centre, State Forestry Monitoring Council, Marz Administration (Nature Resource and Agricultural Units, Program Development Units, Land Management Units). Under the Ministry of Agriculture, the Forest State Monitoring Centre monitors the implementation of Armenia's Forest Management Plans. The Government will develop the new inventory of forests and forest lands between 2018 and 2019. One of the key baseline projects is GEF funded UNDP implemented *Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-eastern Armenia*, which will work on the integration of sustainable forest and land management objectives into planning and management of forest ecosystems to reduce degradation and enhance ecosystem services in two marzes covering 0.65 million hectares; and demonstrate sustainable forest management practices. It is expected that by the end of this project, at least one forest management plan protocols for mainstreaming ecosystem, climate risk mitigation and biodiversity considerations into forest management will be developed and approved by the Ministry. Various resource managers, users will be trained on sustainable forest management. During this project period, the state non-commercial organization Hayantar will carry out inventory of forests and forest lands with the state budget (1,080,200 USD). The government will also develop forest management plans with the support of GIZ. Based on the Government Decision N1232, Government will implement reforestation and afforestation activities in 15,000 ha (5000 hectares/year) in 2018-2020. Recently, the State Forest Committee was established by Decree N 182-N of 22 February 2018, where the functions of forest conservation and use are separated. In between 2018-2020, the Government will establish the Forest Service organization for coordinating the forest protection programs. The committee and the Forest Service organization will development of the forest management plans with the support of international organizations. Without support of this project, national forestry organizations in Armenia will continue to gather land and forest resource data from a series of sample plots in order to assess current forest resource trends without the help of a GIS-based data gathering and analysis system to provide guidance and assistance for the sustainable management of forest resources.

In Azerbaijan, The Ministry of Ecology and Natural Resources of the Azerbaijan Republic (MoENR) is the primary agency responsible for carrying out various measures in biodiversity conservation and the sustainable use of natural resources, including afforestation and restoration, in the forestry sector to increase tree cover and protect forests. Under the MoENR, the Forestry Development Department (FDD) is responsible for developing forest management and strategy and for the management of forest resources. In Azerbaijan, strengthening institutional structures and capacities of forestry sector; strengthening public awareness and stakeholders' participation for sustainable forest management; strengthening protection and climate change adaptation; development of research and education on forestry have been identified and being implemented. In addition, development of forest planning and monitoring are needed but are not implemented fully yet. The Government, through the MoENR's FDD, usually rehabilitates about 7,500 ha forest areas; does afforestation on about 2,500 ha of land; plants about 3,000 trees every year. Therefore, it is expected that the Government's rehabilitation and afforestation efforts will be completed on about 30,000 ha between 2018 and 2020. In

terms of forest assessments and monitoring, the government is unable to devote adequate resources. Forest based inventory and data being used for planning and management of the country's forests, both at national and local level, will remain inconsistent, incomplete and out of date. The country will continue to do the forest inventory based on the ground surveys and aerial photo interpretation. The GEF funded FAO implemented 'Forest Resources Assessment and Monitoring to Strengthen Forest Knowledge Framework in Azerbaijan' will be the major baseline activity in the country on forest management. The Project aims to introduce sustainable forest management into Azerbaijan in order to increase social and economic benefits from forests, to improve the quality of existing forests and to increase carbon sequestration. In between 2018-2019, the project will assist to develop a system to provide country-wide reliable, up-to-date information on forest resources, forestry related elements. The Project will demonstrate multifunctional forest management methodologies leading to carbon sequestration, improvement in forest and tree resources and their contribution to local livelihoods.

In Georgia, forests are one of the most valuable natural resources and occupy about 40% of the country's territory with significant potential in the production of wood and wood products. Forest management and forestry sector reform is a key issue of discussion. Since 2000 there have been several attempts to reorganize the forestry sector and to establish an effective institutional model with the goal of sustainable forest management, though due to the lack of a clearly defined strategy and action plan the processes could not be developed and positive results could not be achieved. The 2013 National Forest Concept for Georgia recognizes the strategic role of forests and aims at establishing a system of sustainable forest management. Main priority directions of the National Forest Concept are forest planning and restoration of degraded forests and reforestation. The Government currently implements some key initiatives to support the implementation of the Forest strategy. This process is supported through the project "Accountability Systems for Sustainable Forest Management in the Caucasus and Central Asia", implemented by FAO. The project aims to strengthen national forest sectors by facilitating a participatory, multi-stakeholder process to develop accountability systems with the participation of international and national experts. The Government continues to develop national forest inventory. The inventory will continue to provide reliable information about Georgian forests; reporting on national, regional and global level; and providing reliable data on quality & quantity of Georgian forests. The Ministry of Environment Protection and Agriculture will continue to the implementation of forest reform on focusing the development of policy tools, modernization of forest management practices, strengthening the capacities of authorities and civil society, and enhancing evidence based policy dialogue. In between 2018-2019 with the support of the Austrian Development Cooperation, the Government will mainstream forest policies into other sectors' policies (Agriculture Strategy and Action Plan, Rural Development Plans, Climate Change Action and Mitigation Plans, Energy Policy and Strategy, Socio-Economic Development Strategy). The Ministry will continue raising awareness to advocate forest policies, and public engagement. The Government will conduct a cost benefit analysis, which will cover forest industry analysis; firewood production analysis; forest welfare function analysis; and forest carbon credit analysis.

**Relevant projects for the South Caucasus:** A number of projects and initiatives that have been and continue to be implemented in the South Caucasus in both regional and national levels that are relevant to the proposed GEF project.

The **GIZ's "Integrated Biodiversity Management, South Caucasus Programme - IBIS" (2015-2019)** aims to advise partners in integrated land use management based on geo-spatial data. Georgia currently implements a National Spatial Data Infrastructure, which is in line with the EU framework for geo-data management (INSPIRE). The Armenian government has also implemented IT-based systems for environmental data management like the National Forest Management Information System, which could be a stepping-stone for a more harmonized and comprehensive approach towards geo-spatial data management and policy. Azerbaijan is currently working towards the development of comprehensive geo-spatial data systems for agricultural and environmental management.

The objective of the **BMZ/KFW funded project (2015-2019) "the Transboundary Joint Secretariat for the South Caucasus"** is to maintain biodiversity in Armenia, Azerbaijan and Georgia without negatively affecting the livelihoods of the rural population in the long term. The project supports the development of the Eco-Regional Conservation Plan (ECP) and its implementation in Armenia, Azerbaijan and Georgia. Through regional cooperation in the conservation sector, TJS III also contributes to crisis prevention and conflict mitigation in the South Caucasus. This project will also promote improved knowledge sharing and institutional capacities for sustainable forest management.

WRI's GEF support **Global Forest Watch** project is already active in Georgia to build a Forest and Land-use Decision Support System, which is proactively engaging user groups to ensure that information is available, up-to-date, and used

effectively for forest and land-use management decisions. The project will have an impact to improve decision making on land use and sustainable forest management, although it does not have a large restoration component.

The Global Forest Watch project in Georgia currently supports projects with partner NGOs, whose work will provide additional data for the Forest and Land-use Decision Support System and illustrate the portal's impact for the project's use cases, which apply GFW data directly in the context of relevant policy and implementation issues

- Green Alternative is implementing "Development of Biodiversity Monitoring System for Assessment of Forest Protected Areas." This project is strengthening conservation efforts by further developing the National Biodiversity Monitoring System to improve protected area management. The study will better understand how much of protected areas support nature conservation and will help the monitoring, management and planning of protected areas.
- NACRES is implementing "Supporting the Integration of Sustainable Forest Management of Practices in Georgia by Provision and Analysis of Key Data Using Remote Sensing Technologies," which is identifying, classifying and mapping Georgia's key forest habitats to complete the process of establishing the Emerald Network in Georgia, supporting national obligations under the Bern Convention. In addition, the project is promoting responsible utilization of non-timber resources by identifying relevant important wildlife habitats using remote sensing and GIS to better understand the socio-economic implications of non-timber resource use.
- Caucasus Environmental NGO Network (CENN) is implementing "Promotion of New Technologies and Information Communication Tools to Enrich Forest Management Information System," which looks at forest vulnerability analysis and mapping to better understand factors relating to forest degradation, based on GFW data and CENN's Atlas of Natural Hazards and Risks in Georgia. The final map will be uploaded into the portal as a data layer to provide new insights. This project also assesses lost forest territories by digitizing old forest stand maps (pre-2011) and comparing forest fund borders with those from present day to see where forests may have been lost and develop recommendations for corrections and create a policy dialogue.

### **1.3) THE PROPOSED ALTERNATIVE SCENARIO, WITH A BRIEF DESCRIPTION OF EXPECTED OUTCOMES AND COMPONENTS OF THE PROJECT**

The project's objective is to address barriers that prevent up-to-date available information and to help facilitate commitments to restoration by developing an innovative user-friendly tool that easily share information, provide on-the-fly analyses, and enable legal and political conditions across sectors to increase tree cover by restoring forests. Access to information enables governments, communities, civil society, companies and the media to hold those responsible for forests accountable for the threats facing forests. This will be achieved through the development of innovative user-friendly tools that contain shareable and reliable up-to-date local and global information and provide on-the-fly analyses for easy reporting, decision making, monitoring, enforcement, and intervening. The project, using technology developed by Global Forest Watch (GFW), will create an interactive forest and land-use web-based portal with local and global data, and in local languages, that will be customizable and include important ready-to-use analyses for better decision making and to more easily share information. Information will also be available on the main Global Forest Watch platform and the Resource Watch platform, which is being launched in 2018 and will pull from information across World Resources Institute's various platforms, including Global Forest Watch, to focus on how current trends in data, technology, media and human networks can inform decision-making around natural resources. In addition to creating national portals and contributing to global platforms, the project will facilitate national commitments to restoration and improved enable legal and policy conditions across sectors to enhance the roles of trees in agricultural landscapes and to restore forests in ways that support the strategies of avoided deforestation and increased connectivity of forest complexes.

**Component 1 - Catalyze better land-use decision making through access to reliable up-to-date information:** In the proposed alternative scenario, with GEF support, the project will mobilize and support governmental counterparts and a broad range of national stakeholders to provide input on the design of a user-friendly interface which matches their daily needs for information. The project will contribute to the goals of the GEF SFM reporting and verification (MRV) needs of performance-based projects and programs, as expressed in the national determined contributions of Armenia and Azerbaijan, through integration of forest cover change data with biomass maps being developed by groups such as Winrock and the Woods Hole Research Center. The outcomes of the project will implement a forest and land management tool that can support the development and implementation of collaborative cross-sectoral integrated land

use management plans, at the regional, national and sub-national scale. Furthermore, by applying approaches and tools that have been developed as elements of the Restoration Opportunities Assessment Methodology (ROAM) for analysis of Forest Landscape Restoration (FLR) opportunities and implementation strategies in the South Caucasus countries, the project will contribute to the improved understanding of the socio-economic benefits of FLR. Data will be collected and analyzed to model and validate the economic benefits of scaling up FLR successes, along with anticipated carbon benefits and financial returns of FLR investments. To achieve its goals, the project will carry out an assessment of available and relevant data and, with the help of an established multi-sectoral technical working group within each South Caucasus country (see Component 2 below), will determine the content and structure of a forest and land-use decision support web-based tool for each country, that will be interactive, customizable and can perform instantaneous analyses for improved decision making. In addition, the tool will also integrate an interactive restoration opportunities map, using modelling based on criteria chosen by the technical working groups, that will improve information to implement reforestation projects and meet national and international restoration commitments. The restoration opportunity map will be created by (1) identifying national land use challenges and landscape restoration options to address them; (2) identifying criteria to assess the potential to scale up landscape restoration options selected for mapping and compile the best readily available spatial data; and (3) producing maps and area statistics for national restoration options. The maps will indicate where restoration criteria have been met and will guide where to conduct further assessment and stakeholder engagement. The development of the map will help government, civil society and business leaders ascertain how they will achieve restoration. Local leaders can use the map to identify restoration activities, which could involve everything from planting trees alongside crops to reforesting clear-cut forests to adding vegetation along roads.

**Component 2 - Increased capacity of key actors and institutions to apply up-to-date information to land-use decisions:** The project will establish a multi-stakeholder national technical working groups, consisting of government agencies and representatives, NGOs, and academia and determined by each South Caucasus country on an individual basis, to carry out an assessment of available and necessary data to input into the national platforms, based on national priorities and the needs of decision makers. In addition, the working group will also perform an assessment of potential restoration opportunities, which is a critical step towards forging a coordinated strategy for scaling up landscape restoration in project countries. An important aspect of this component is the hosting of a series of regional and national workshops focused on analyzing different landscape restoration options for the countries by identifying the most pressing land use challenges currently affecting Armenia, Azerbaijan and Georgia, as well as a list of restoration opportunities that could address these challenges. National technical working groups will be tasked with mapping and quantifying where different restoration options could potentially be implemented in order to help inform a national restoration target that will contribute to the many national priorities. Because of the multi-sector, multi-stakeholder nature of the technical working groups, the priorities would cover a wide range of landscapes including forest lands, agricultural lands and rangelands. These maps will be integrated into the broader forest and land-use web-based portal that will be built based on the needs of the governments of the South Caucasus countries, and will include instant analysis features for decision making.

The project will support the technical working group by planning and organizing meetings, facilitating discussions with clear objectives, and ensure that the group's feedback is directing the data that goes onto the forest and land-use portal as well as directing the criteria used to model the restoration opportunity maps. The project will identify and document key success factors in observed cases of successful local and national initiatives, and diagnose policy reforms, institutional strengthening, capacity building, expanded communication an outreach and other interventions that are needed to enable and accelerate the scaling up the enabling conditions for better land-use decisions and forest landscape restoration. The project's outcome will be awareness and understanding of the status of forested landscapes on a national and regional scale including restoration opportunities by national and local governments and stakeholders.

The project will aid in achieving the ambitious goals of National Action Plans (NAPs) that contribute to the 10-year strategy of the UNCCD which aims to improve the lives and ecosystems of those affected by desertification. The proposed project will also assist countries in achieving the GEF-6 biodiversity strategy to improve the effective management of the national ecological infrastructures and provide up-to-date information that makes it easier to integrate biodiversity and ecosystem services into development and finance planning. In addition, the project will help countries achieve the goal of Aichi CBD target 5, which states, "by 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought to close to zero, and degradation and fragmentation is significantly reduced" by providing a platform to better visualize land-use and forested areas and monitor tree cover loss, thereby limiting forest loss and fragmentation and also by better understanding areas of opportunity for restoration to decrease forest

degradation and fragmentation. It will also contribute to target 15 which states “by 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks have been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems,” by the creation of restoration opportunity maps, which will help governments make decisions on the conservation and creation of new agricultural lands, forested areas including production forests, and protected areas. This project will assist countries to sequester greenhouse gas emissions, adapt to climate uncertainty and achieve more sustainable forest landscape management.

#### 1.4. Incremental Cost Reasoning and Expected Baseline Contributions from the Baseline, the GEFTF, LDCF/SCCF and Co-financing

Current practices	Alternative practices	Expected benefits
<p>Component 1: Catalyze better land-use decision making through access to reliable up-to-date information</p> <p>Countries currently have no centralized platform for spatial information on forests. GFW is set up on a global scale and in select target countries; however, its application in Armenia &amp; Azerbaijan is very limited. Restoration is a priority, but capacity is limited to achieve national targets as expressed under UNCCD, Aichi 15, NCF, etc.</p>	<p>Decision support tools with local and global up-to-date data will make information accessible and provide analyses needed for sustainable forest management.</p> <p>A restoration opportunity mapping exercise will be conducted that will add new information to the tool that addresses specific restoration issues in the South Caucasus countries. The mapping will quantify the area of opportunity in each country based on best local knowledge and WRI’s tested Restoration Opportunities Assessment Methodology.</p>	<p>National decision support tools will dramatically improve the availability of forest related information, allowing users to make analysis and easily obtain information they need for decision making, including for international reporting (e.g. UNFF, FAO, ENECE, SDGs etc.)</p> <p>Enabling legal and policy conditions will be improved across sectors to enhance the roles of trees in agricultural landscapes and to restore forests and increase tree cover in ways that contribute to the strategies of avoided deforestation, land degradation, and contribute to afforestation and biodiversity conservation.</p>
<p>Component 2 - Increased capacity of key actors and institutions to apply up-to-date information to land-use decisions</p> <p>There is limited awareness and understanding of the status of forested landscapes on a national and regional scale including restoration opportunities by national and local governments and stakeholders.</p>	<p>Capacity and governance will be assessed to identify gaps, and in-country partners will be heavily engaged to build capacity and improve governance through learning events and exchanges. A knowledge network will be facilitated that brings together experts and organizations engaged with forestry and landscape restoration to facilitate technical exchange across sectors and regions.</p>	<p>Training and outreach on use of the portal and restoration opportunities map for government, NGOs, academia, and other civil society organizations that will bring sustainability to the project for continued use and expertise.</p>

**Scenario without the GEF investment:** The baseline for the project rationale is mainly founded on efforts and actions implemented by the government institutions in cooperation with international funds and agencies. Without the GEF investment:

- Data will be hard to find and obtain and will remain dispersed across multiple sectoral stakeholders and ministries;
- Spatial analyses will require GIS expertise for basic land-use management decisions;
- Restoration plans will remain vague and undefined with unmet goals.

**Scenario with the GEF investment:** GEF funds will serve as catalyst to develop a coherent and coordinated approach to address forest management transparency and progression of restoration commitments. More specifically, the GEF investment will facilitate:

- In Armenia and Azerbaijan, an interactive forest and land-use portal with both local and global data, and in local languages, that will be customizable and include important ready-to-use analyses for better decision making and to more easily share information;
- In Armenia, Azerbaijan and Georgia, a restoration opportunities map, created by a multi-sectoral committee, that illustrates the main areas of opportunity for restoring forests and landscapes;

- Training and outreach on use and upkeep of the portal and restoration opportunities map for government and other important stakeholders.

### **1.5. Global Environmental Benefits (GEFTF, NPIF) and/or Adaptation Benefits (LDCE/SCCF)**

As the home of two-thirds of all plants and animals living on land, forests are the most biodiverse terrestrial ecosystems. Emissions from deforestation and forest degradation accounts for 15-17% of global human induced GHG emissions and without addressing poor forest management it will be impossible to limit global warming to the target of two degrees Celsius (UNFCCC). The project will generate significant global environmental benefits by:

- Supporting the improved conservation and management of a total of approximately 1.7 million ha of forest habitats in Armenia, Azerbaijan, and Georgia;
- Through the identification for areas of reforestation and restoration, reduced the forest fragmentation in South Caucasus;
- As a result of the above-mentioned benefits, support will be provided to the enhanced conservation of natural habitat in the Caucasus region, a biodiversity hotspot with at least 1,600 endemic species.

### **1.6. Innovativeness, sustainability and potential for scaling up**

**Scaling Up:** GFW has been implementing and expanding its country-focused forest and land use platforms for over 10 years, creating new applications and increasing its uptake around the world. GFW's current project in Georgia (funded from GEF-5) is the first deep dive of GFW on a national scale within temperate landscapes. The Georgia GFW project has so far developed a draft forest platform in cooperation with the government of Georgia that has already seen major interest and uptake within the Ministry of Natural Environment Protection and Agriculture as well as by NGOs and civil society in Georgia. Currently still under development, the first iteration of the Georgia portal, which is available in Georgian language, is in use by stakeholders. Users from the Ministry have provided feedback that the portal has already improved coordination between agencies, particularly with regard to the accessibility and visualization of data. The success of the portal's impact on internal coordination within the Ministry has also led to expressed interest in scaling the portal beyond the forestry sector, to include sectors such agriculture, energy and cultural affairs. In addition, NGOs have provided positive feedback that available data, which previously required technical expertise to work with, is now readily visualized on the portal and accessible and understandable to a non-technical audience, leading to cost savings since the NGOs previously had to pay technical specialists to perform analyses. By expanding the focus to the South Caucasus region, outcomes and lessons learned can be shared and incorporated to further understand GFW's potential impact on national and regional scales and provide opportunities for wider use and more access to data throughout the Greater Caucasus and Eurasia.

**Sustainability:** The lead executing agency, World Resources Institute (WRI) has a long history of working in countries over the years where it introduced and installed new technology for better land use decisions. In order to ensure the GFW platform system is maintained, managed, and incorporated as standard operational procedures in each pilot country to inform better and more sustainable land use decisions is based on four aspects:

1. Integration and ownership from the onset: The vision, direction and management of introduced technology is country-led for national ownership and the project will work closely with and through seconded staff from government and other stakeholders, in addition to part-time or full-time local consultants, to integrate the project into decision making processes of government and other stakeholders. Staff and consultants working with the project will be physically situated within a ministry building or nearby to maintain close and constant contact and to ensure that local stakeholders are part of the daily decision making, communication, and technical development of the project. Furthermore, these staff members become experts on the introduced technology and pass on their knowledge so that WRI support is no longer needed. Decisions about the direction of the project will be made by a multi-stakeholder technical working group to assure direct ownership on the project's outcomes.
2. Technology introduced is adapted by and for each country: The needs assessment is a major part of the project and is how data, analysis tools and technology is adapted specifically to national needs. This guarantees that products developed add real value to the decision-making process and enhances the securement of funding and staff allocation from the country for upkeep. Countries will have an active role in the design, development, and maintenance of the portal and decisions will be led nationally rather than by the Project team.
3. Minimal maintenance costs: Introduced technology is robust yet simple. In implementing the project, the Project will pay for start-up costs to install and integrate new technology into current systems, such as the purchase of

a server and software that will last at least 5-10 years. GFW relies on open source, free software whenever possible, and any software purchases are one-time licence purchases rather than ongoing fees. Maintenance updates and upgrades to the portal are performed centrally at WRI, with minimal support needed to individual national portals for bug fixes. Hardware purchased by the project are installed by ministry IT departments, with support with GFW team, so knowledge on the installation process and system structure is imbedded into government departments from the onset. If any decisions at the national level require ongoing costs, the GFW will work closely with ministries to ensure they are ready and willing to take on those costs going forward before those financial decisions are made. As part of its sustainability strategy, GFW will not undertake any ongoing financial cost that the ministries will not agree to upkeep and maintain.

4. **Clear exit strategy:** The Project will work with national governments and stakeholders to develop and implement clear and easily actionable exit strategies. Rather than following the conventional process of building a product, providing training and then handing it over, WRI will work within the ministry to designate who will be responsible for maintaining which features and will work with those designated people, agencies, departments, and stakeholders from the beginning. Part of WRI's exit strategy is to ensure that stakeholders not only participate but play a major role in leading the development of technology itself, therefore being able to understand its underlying structure and diagnose and fix bugs and issues with little or no support from WRI. WRI will also work with a diverse range of people and agencies to ensure knowledge of the new technology is widespread rather than limited to a few people.

Capacity building is one of the major components of the project and as a result there will be a strong focus on the knowledge transfer and training on data management, infrastructure maintenance, and the use and application of GFW as a tool for insights from up-to-date information and analyses for land-use decision making. In addition, the project will institute a multi-sector technical working group in each country that will drive the direction of the project and make all major decisions including which spatial information to include in the portal, criteria for the restoration opportunities map, and development of strategy to ensure longevity of the project's outcomes. The inclusiveness of the technical working group will ensure deep knowledge of the project from within and a sense of ownership and responsibility for maintenance after the project is completed.

**Innovativeness:** The project promises an innovative tool to governments and non-government stakeholders alike, significantly increasing the efficiency and cost-effectiveness of their forest stewardship efforts. As new satellite constellations with greater spatial and temporal resolution are launched, or as new algorithms for interpreting remote sensing data are developed and rapidly adopted by GFW, the initiative will integrate information from these new and unique datasets into the GFW system. In addition, global datasets available on WRI's Resource Watch platform that are relevant to country needs can be easily integrated into the national platforms to provide contextual data that are relevant to land use and biodiversity, such as water and energy data. Since they will share the same API, as new widgets and dashboards are developed on both the Resource Watch and Global Forest Watch main platforms, these features can be adapted for national platforms depending on analytical needs and priorities.

Coordination, especially regarding spatial data, is often a major challenge Ministries face, and one which this project directly addresses through technological innovation. The project will provide Armenia and Azerbaijan with a centralized data management and web support system for forest landscapes, which they currently do not have, and provide all three South Caucasus countries with an easy to understand and comprehensive tool to better take advantage of restoration opportunities using a tested scientific method. In addition, the tools developed will be the first of their kind to combine restoration opportunities with tree cover loss/gain data from GFW, a novel integrated approach. The tool will be dynamic, customizable, with personalized dashboards and the ability to add data and analyses that are tailored to the needs of each country.

2. **Stakeholders.** Will project design include the participation of relevant stakeholders from [civil society organizations](#) (yes  /no ) and [indigenous peoples](#) (yes  /no )? If yes, identify key stakeholders and briefly describe how they will be engaged in project preparation.

Stakeholder	Current Mandate / Responsibilities	Expected Role in Project Preparation
<b>ARMENIA</b>		

Ministry of Nature Protection of the Republic of Armenia (MoNP-AM)	MoNP-AM is responsible for: <ul style="list-style-type: none"> <li>• developing the public policies and strategies for rational use and reproduction of the environment</li> <li>• elaborating the environment-related legislation, standards and technical regulations</li> <li>• developing economic mechanisms including rates for environmental and utilization fees for protection of environment and rational use and restoration of natural resources (except mineral reserves).</li> </ul>	A representative of the MoNP-AM will lead the National Project Steering Committee. All documents prepared within the project will be discussed and agreed with MoNP-AM.
Ministry of Agriculture of the Republic of Armenia (MoA-AM)	For implementation of its goals and objectives, the Ministry performs, <i>inter alia</i> , the following: <ul style="list-style-type: none"> <li>• approval of relevant administrative statistical reporting forms and maintenance of administrative statistical registers based on the collected data and information</li> <li>• elaboration and monitoring of development programs in the sphere of preservation protection, reproduction and utilization of forests, as well as programs for the efficient use of forest resources</li> <li>• elaboration and monitoring of programs for fire safety of forest lands, as well as for pest and disease control measures</li> <li>• forests classification according to their functional significance</li> <li>• approval of state forest management plans</li> <li>• elaboration and monitoring of programs for increasing the efficiency of agricultural land use and melioration (improvement) in the Republic of Armenia according to the legislation</li> <li>• elaboration and monitoring of innovation programs, as well as programs for introduction of scientific-technical policies and advanced technologies</li> </ul>	Through its involvement in the National Project Steering Committee, MoA-AM will help to plan and implement project activities and achieve planned results.
<b>“Hayantar”</b> (SNCO <i>Armenia-Forest</i> ) - State Non-Commercial Organization (SNCO) of the Ministry of Agriculture of the Republic of Armenia	SNCO <i>Armenia-Forest</i> ensures the conservation, protection, reproduction, use, registration, stock taking and inventory, cadastre maintenance of forests, improvement of forest productivity and forest soil fertility, sustainable use of forest resources. It also performs the following business activities - timber harvesting, processing and marketing, growing and marketing of planting stocks (seedlings, plantlets), non-timber forest use (hay harvesting, animal grazing, installation of beehives, collection of wild fruit, nuts, mushrooms, berries, medicinal herbs and technical raw materials), as well as processing and marketing of the aforementioned bio-resources, growing agricultural products on agricultural plots, processing and marketing; provision of recreation and tourism-related services as well as provision of consultancy services and information.  Responsibilities of the SNCO <i>Armenia-Forest</i> , <i>inter alia</i> , includes: <ul style="list-style-type: none"> <li>• Implementation of forest rehabilitation and reforestation</li> <li>• Planning, implementation coordination, management and implementation control of reforestation and afforestation, as well as seed growing, selection – expansion of seed production, and forest reclamation activities</li> </ul>	SNCO <i>Armenia-Forest</i> will be directly involved in data gathering and national forest ecosystem and landscape restoration planning and implementation.

	<ul style="list-style-type: none"> <li>• Planning, implementation coordination, management and implementation control of reforestation and afforestation activities, rehabilitation of low value tree-bush and low density forest stands, as well as activities promoting natural coppice-shoot regeneration.</li> </ul>	
Local NGOs/CBBs / Local communities and local community members (local population) adjacent to forests	Local NGOs/CBBs / Local communities and local community members adjacent to forest areas are ground-level stakeholders and final beneficiaries regarding forest ecosystem services.	Local NGOs/CBBs / Local communities and local community members will play participatory role in forest ecosystem and landscape restoration planning and especially in implementation of pilot restoration projects at local level.
Research organizations and academia	Many of the research organizations are the owners of important historical and current data on forestry and forest related issues. These partners will help to identify overall forestry and forest restoration priorities and solutions, including agrotechnological best practices for forest restoration.	Through their participation, research organizations and academia will technically assist in planning and implement of project activities.
<b>AZERBAIJAN</b>		
Ministry of Ecology and Natural Resources of the Azerbaijan Republic (MoENR-AZ)	<p>In the sphere of forest management, the Ministry of Ecology and Natural Resources of the Azerbaijan Republic (MoENR-AZ):</p> <ul style="list-style-type: none"> <li>• Implements the state policy in natural resources (including forests), their usage, restoration and protection and protection of biodiversity</li> <li>• Plans and implements the state programs in usage, restoration, establishment, protection of the forests</li> <li>• Works out and implements corresponding national activity programs on ecology and nature exploitation</li> <li>• Performs enforcement activities in the spheres of the environmental protection and the use of natural resources to provide population with right to live in healthy environment</li> <li>• Carries out state supervision in preservation of environment in the process of exploitation of natural resources, minerals, flora (forests as well), fauna (fish as well), water sources, as well as in ecological restoration and protection of the soil</li> <li>• Implementers corresponding international obligations</li> <li>• Implements state policy in ecological education;</li> <li>• Implement state control over hunting and protection and use of hunting production</li> <li>• Executes other duties according to the national legislation</li> </ul>	<p>A representative of the MoENR-AZ will lead the National Project Steering Committee.</p> <p>MoENR-AZ staff will be involved in all stages of project implementation.</p> <p>All documents prepared within the project will be discussed and agreed with MoENR-AZ.</p>
Forest Development Department of the Ministry of Ecology and Natural Resources of the Azerbaijan Republic (FDD-AZ)	FDD-AZ is directly responsible for the forest management (including forest restoration). Other than the FDD-AZ's central office and its central structural units, there are more than 40 local territorial Forest Management Enterprises <sup>19</sup> (FME's), number of State Nurseries and one Forestry Research Institute under the management of the FDD-AZ.	FDD-AZ will be directly involved in data gathering and national forest ecosystem and landscape restoration planning and implementation.

<sup>19</sup> Forest Protection and Restoration Enterprise.

Local NGOs/CBBs / Local communities and local community members (local population) adjacent to forests	Local NGOs/CBBs / Local communities and local community members adjacent to forest areas are ground-level stakeholders and final beneficiaries regarding forest ecosystem services.	Local NGOs/CBBs / Local communities and local community members will play participatory role in forest ecosystem and landscape restoration planning and especially in implementation of pilot restoration projects at local level.
Research organizations and academia	Many of the research organizations are the owners of important historical and current data on forestry and forest related issues. These partners will help to identify overall forestry and forest restoration priorities and solutions, including agrotechnological best practices for forest restoration.	Through their participation, research organizations and academia will technically assist in planning and implement of project activities.
<b>GEORGIA</b>		
Ministry of Environment Protection and Agriculture of Georgia (MoEPA-GE)	MoEPA-GE is responsible for: <ul style="list-style-type: none"> <li>development and implementation of the state policy on protection of forests and use of forest resources;</li> <li>coordination of the forest sector reforms, review and adoption of forest management plans, coordination of international activities and processes, supporting effective implementation of the National Forest Concept of Georgia, as well as ensuring public participation in forest related decision-making process.</li> </ul>	A representative of the MoEPA-GE will lead the National Project Steering Committee.  MoEPA-GE, through its Forest and Biodiversity Policy Office (FBPO-GE), will help to develop National Forest Ecosystem and Landscape Restoration Plan.
National Forest Agency (NFA-GE) of the Ministry of Environment Protection and Agriculture of Georgia	The responsibilities of the NFA-GE, <i>inter alia</i> , include: <ul style="list-style-type: none"> <li>Implementation of forest maintenance and reforestation, sustainable use of biodiversity components of the forest fund territory, management of forest fund and conducting necessary activities; regulation of forest use; controlling forest use on the territory on forest fund (except license requirements); forest inventory and management planning.</li> </ul>	NFA-GE will be directly involved in data gathering and national forest ecosystem and landscape restoration planning and implementation.
Local NGOs/CBBs / Local communities and local community members (local population) adjacent to forests	Local NGOs/CBBs / Local communities and local community members adjacent to forest areas are ground-level stakeholders and final beneficiaries regarding forest ecosystem services.	Local NGOs/CBBs / Local communities and local community members will play participatory role in forest ecosystem and landscape restoration planning and especially in implementation of pilot restoration projects at local level.
Research organizations and academia	Many of the research organizations are the owners of important historical and current data on forestry and forest related issues. These partners will help to identify overall forestry and forest restoration priorities and solutions, including agrotechnological best practices for forest restoration.	Through their participation, research organizations and academia will technically assist in planning and implement of project activities.

3. *Gender Equality and Women's Empowerment*. Are issues on [gender equality](#) and women's empowerment taken into account? (yes  /no ). If yes, briefly describe how it will be mainstreamed into project preparation (e.g. gender analysis), taking into account the differences, needs, roles and priorities of women and men.

Deforestation is a growing problem in the three countries and deforestation can affect men and women differently, in part due to the predominance of men in both the local production of commodities as well as in the local and national governing bodies involved in natural resource management. Women are often excluded from the processes of the forest and resource decisions and can also be excluded from the use of forest resources, making them more vulnerable to the impacts of commodity land conversion and deforestation. In addition, the role of rural women as food producers and providers links them directly to the management of genetic resources for food and agriculture and puts them in a unique position as decision makers for biodiversity protection including seed production, species conservation, ecosystems and natural resource use. Agriculture is more productive in areas with higher biodiversity and improved land management can lead to increased biodiversity, especially in degraded areas, positively impacting women in rural communities.

Armenia: In Armenia, people who live in rural areas rely on small scale subsistence farming, yet limited ownership of land by women reduces their capacity to adapt to losses or to make decisions about how land is used. According to the FAO, over 40% of working women in Armenia are employed in agriculture, compared to about 30 percent of men.<sup>20</sup> Because of this, issues such as biodiversity loss, which is linked to land and soil degradation, could disproportionately affect women’s livelihoods and financial security yet women are often not included in decision-making at the community level.

Azerbaijan: The government of Azerbaijan is actively working to ensure equal opportunities for both women and men, however gender disparities are still common. In Azerbaijan, women have higher unemployment, higher marginalization in the workforce and lower participation in decision making. 47% of working women are employed in the agricultural sector, a much higher rate than men, and many more are not paid for their work.<sup>21</sup> Women in rural communities are often not taken into account for decisions relating to land use, including the protection of biodiversity.

Georgia: In Georgia, agricultural production is often performed by women, with roles such as seed selection, sustainable use of plant and animal diversity, and livestock management. Yet despite a greater proportion of women workers, official statistics show that the proportion of land operated by female farmers is 20%, compared to 80% operated by men.<sup>22</sup> In addition, rural households that are headed by women suffer more from poverty than those headed by men. Some of the main barriers for women are a lack of training, persistent stereotypes, and low participation in local decision making.

The analyses of economic benefits, key success factors, and enabling conditions and related recommendations will take account of gender dimensions and highlight the importance of attention to gender to the achievement of desired project outcomes. The project will also ensure that women are included fairly in the make-up of technical working groups, training, knowledge exchanges and workshops. The project will also take into consideration the need for women-specific training and workshops.

*4 Risks.* Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable).

Risk	Level of Impact	Mitigation Measures
Weak coordination among ministerial bodies and lack of support from national governments	<b>High</b>	It will be critical to foster national governments’ ownership from the onset. Practical measures to pre-empt this risk will include the establishment of coordination teams in each country, comprised of government personnel and civil society. To ensure sustainability, measures will be taken to ensure that the government and non-government partners are fully enabled to continue to take full advantage of the web tool after the project cycle has ended. The sustainability measures will include but not limited to: (i) enabling the

<sup>20</sup> Source: UN report finds gender inequalities persisting in rural Armenia (2017) <http://www.fao.org/armenia/news/detail-events/en/c/891952/>

<sup>21</sup> Source: Women empowerment through enhancing agricultural extension services in Turkey and Azerbaijan (2014) FAO <http://www.fao.org/europe/news/detail-news/en/c/272933/>

<sup>22</sup> Source: Pervasive Gender Inequality in Rural Areas (2016) UN Women <http://georgia.unwomen.org/en/news/stories/2016/04/pervasive-gender-inequality-in-rural-areas>

		Countries to lead the introduction of the technology by establishing close collaboration between Government staff and the project team; (ii) ensuring physical presence in the Ministry in order to be part of the daily decisions; (iii) customizing the tool for the country needs after a thorough needs assessment and giving to the national stakeholders an active role in designing and developing the platform; (iv) keeping the maintenance cost at minimum (v) development of an actionable exit strategy for each country in collaboration with stakeholders.
Sub-optimal capacity in pilot countries hampers sufficient uptake	<b>Medium</b>	Existing gaps in capacity in the countries will be identified and a sound and well-designed capacity building program targeting government and non-government partners constitutes a critical element of the project, and will be essential for project success and as the basis for long-term sustainability. A core component of this project is to build the capacity of government and other local stakeholders to make practical use of this data, including through transfer of knowledge, skills, and technology. Key capacities include: <ul style="list-style-type: none"> <li>• Capacities to generate and aggregate national and subnational datasets pertaining to forest landscapes</li> <li>• Capacities manage data in a centralized digital repository and make data accessible to the public.</li> <li>• Capacities to analyze complex data to generate policy-relevant insights.</li> </ul>
The needs and priorities of the more disadvantaged groups of society, including youth and women’s groups are not adequately taken into account by the project	<b>Medium</b>	All aspects of the project’s design, implementation strategy and monitoring and evaluation process will closely look at this important aspect and take this risk into account. This will inform the set-up of adequate stakeholder consultation and involvement mechanisms in each country from project outset, with full support from all project partners, and under the auspices and supervision of UNEP as the GEF implementing agency. Continued, focused and well-targeted communication, consultation, education and involvement efforts with local community groups will be implemented in each country.
GFW proves to be insufficiently cost effective in certain uses and contexts	<b>Low</b>	Compared to analogous approaches in which an individual country would ‘start from scratch’, it is estimated that the baseline information and knowledge provided free of charge by the GFW system represents a 50-75% reduction in costs. This represents a first and highly positive example of relative cost effectiveness based on the use of a generic template with global-level information, supported by national-level refinement and validation.

5. *Coordination.* Outline the coordination with other relevant GEF-financed and other initiatives.

The project will build on and coordinate with the following on-going projects:

**Georgia:** “Global Forest Watch,” a 3 year project (\$1,554,634) is currently being implemented with an objective of the development of a national decision support tool to support improved management of existing forest areas and conservation of biodiversity, reforestation, afforestation programs, improved control of deforestation and on-the-ground monitoring/protection of carbon stocks. This project will build off the output and lessons learned in Georgia to replicate the development and implementation of GFW on a national scale. This project will also fill one of the gaps of the Global Forest Watch project in Georgia by adding a restoration component to inspire the fulfilment of restoration commitments.

Currently, the Regional Environmental Centre for Caucasus (RECC) is executing the UNEP-GEF project “Applying Landscape and Sustainable Land Management (L-SLM) for mitigating land degradation and contributing to poverty reduction in rural areas” The objective of this project is to support the integration of good Landscape and Sustainable Land Management (L-SLM) principles and practices into national policies and institutional frameworks to ensure adoption of economically viable practices by rural communities. In addition, the Project titled “Generating economic

and environmental benefits from sustainable land management for vulnerable rural communities of Georgia” aims to develop and strengthen sustainable land management (SLM) practices and build capacity at municipal scale for their application for the protection of natural capital in Georgia. Both projects will reduce land degradation by building capacity around best practices in sustainable land management.

The UNDP-GEF project “Harmonization of Information management for improved knowledge and monitoring of the Global environment in Georgia” implemented by the Environmental Education Centre, is intended to develop capacities in Georgia for an effective national environmental management framework that addresses different articles under the UNFCCC, UNCCD and UNCBD. The project objective is to develop individual and organizational capacities in the Ministry of Environment and Natural Resources Protection of Georgia and the Environmental Education Centre for improved monitoring of environmental impacts and trends and for elaboration of collaborative environmental management. The project will provide valuable baseline information and jointly promote improved knowledge sharing and institutional capacities for information management.

**Armenia:** Armenia has several ongoing projects that focus on reforestation and maintaining biological diversity. It currently has 2 ongoing GEF projects. The first is “Sustainable Land Management for Increased Productivity in Armenia(SLMIP),” which runs for 6 years (\$3,937,500) and aims to enhance the overall resilience of rural communities living in risk-prone areas of Armenia by investing in sustainable farming, community-led restoration, and capacity building of farmers. The second is “Mainstreaming Sustainable Land and Forest Management in Dry Mountain Landscapes,” which is a 4 year project (\$2,977,169) that will run until January 2020 and aims to enhance sustainable land and forest management in the northeast Armenia to secure continued flow of multiple ecosystem services. The project aims to do this by addressing barriers of inadequate planning, regulatory and institutional framework for integrated forest resource management, and the limited experience among key government and civil society stakeholders in developing and implementing sustainable forest management practices on the ground.

Past GEF supported projects include “Harmonization of National Action Plan to Combat Desertification in Armenia and Preparation of National Report,” which was a 1.5 year project (\$190,000) to review the national action plan of the United Nations Convention to Combat Desertification (UNCCD) in Armenia and elaborate the 2012 National Report on the implementation of UNCCD in Armenia. The follow up of this project is “GEF Support to UNCCD 2018 National Reporting Process – Umbrella II” and the next is “Support to Eligible Parties to Produce the Sixth National Report to the CBD” which is a project to develop the national report to CBD. In addition, “Generate Global Environmental Benefits through Environmental Education and Raising Awareness of Stakeholders” was a 3 year project (\$750,000) to strengthen capacity by using environmental education and awareness raising as tools to address natural resource management issues.

**Azerbaijan:** GEF supported “Conservation and Sustainable Use of Globally Important Agro-biodiversity” runs over 5 years (\$4,160,502) and aims to ensure the conservation and sustainable use of globally threatened crop varieties important for biodiversity, food security, and sustainable land management. Additionally, the project “Forest Resources Assessment and Monitoring to Strengthen Forest Knowledge Framework in Azerbaijan” runs until March 2019 (\$1,776,484) and its objective is to introduce sustainable forest management practices in Azerbaijan to increase the social and economic benefits from forests and to improve the quality of existing forests and increase carbon sequestration. The project will also support implementation of Azerbaijan’s draft National Forest Policy and its commitments under the United Nations Framework Convention on Climate Change (UNFCCC) including restoration and afforestation activities.

Past GEF supported projects include “Sustainable Land and Forest Management in the Greater Caucasus Landscape” (\$5,680,000), which enabled policy for integrating sustainable land and forest management practices into state programs including reducing degradation from overgrazing, and enhancing the carbon storage potentials of forests and pasturelands. In addition, “National Biodiversity Planning to Support the Implementation of the CBD 2011-2020 Strategic Plan,” which lasted 3 years (\$210,000) and integrated Azerbaijan’s obligations under the Convention on Biological Diversity (CBD) into its national development and sectoral framework planning.

6. *Consistency with National Priorities.* Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes  /no  ). If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.

The project is aligned with national priorities in all three South Caucasus countries:

### **Armenia:**

#### 1. National development plans/strategies.

**Armenia's Development Strategy for 2014-2025**<sup>23</sup>. Among environmental risks, the Strategy points to *illegal forest logging* resulting from higher gas prices and *increased desertification risk*. Planned measures to mitigate the above risks include: (a) development and use financial and institutional mechanisms for restoration (re-cultivation) of degraded lands; (b) development and implementation of the National Forest Programme with emphasis on forest plantation and restoration measures; and (c) improvement of an environmental monitoring system in order to ensure application of unified monitoring approaches and standards, and collection of reliable information on the ecological situation as well as statistical data from other sources.

#### 2. Environment action plans/strategies.

**The Second National Environmental Action Programme of the Republic of Armenia (NEAP)** provides an overall framework for integrated environmental management. The NEAP highlights problems in Armenia's forest ecosystems related to degradation and the destruction of forests. It notes that conservation and the sustainable use of forest resources is considered to be one of the main priorities of the state. The Strategy prioritizes the restoration of forested areas and sustainable forest use.

#### 3. Forest programmes/strategies and Biodiversity strategies/action plans.

**Strategy and National Action Plan of the Republic of Armenia on Conservation, Protection, Reproduction and Use of Biological Diversity for 2016-2020 (NBSAP)**<sup>24</sup> is the main biodiversity policy document. The plan addresses the underlying cause of biodiversity loss and comprises actions that target to reduce direct pressures on biodiversity and promote sustainable use. One of the strategic directions of the NBSAP-2 (*Strategic Direction 2. Enhancement of biodiversity and ecosystem conservation and restoration of degraded habitats*) includes the measures to develop the inventory and map of the degraded and fragmented forest and pasture ecosystems, and identify direct and indirect causes of habitat loss.

### **Azerbaijan:**

#### 1. National development plans/strategies.

**Development Concept "Azerbaijan - 2020: The Vision of the Future"**<sup>25</sup>. The main strategic view of the concept is to understand current opportunities and resources and attain sustainable economic growth. One of the main targets is to achieve sustainable socio-economic development from an ecological point of view. *Chapter 11. Environmental protection and ecological issues* addresses that the necessary measures must be taken to protect biodiversity, restore green areas and effectively protect the existing natural resources. An increase of forested and road-protecting green areas are recognized as priority actions in the sphere of creating and restoring forests.

#### 2. Environment action plans/strategies.

**National Environmental Action Plan - Azerbaijan (NEAP)** identifies the threats to loss of biodiversity and loss of forest cover. The plan emphasizes the urgent need for reforestation due to forest fragmentation and heavy forest loss from illegal logging. The State Program on Poverty Reduction and Sustainable Development (SPPRSD) also addresses the environmental concerns.

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<sup>23</sup> Armenia's Development Strategy for 2014-2025 (2014) / Approved by the Governmental Decree of the Republic of Armenia #442 of 27 March, 2014.

[https://eeas.europa.eu/sites/eeas/files/armenia\\_development\\_strategy\\_for\\_2014-2025.pdf](https://eeas.europa.eu/sites/eeas/files/armenia_development_strategy_for_2014-2025.pdf)

<sup>24</sup> Strategy and National Action Plan of the Republic of Armenia on Conservation, Protection, Reproduction and Use of Biological Diversity for 2016-2020 (2015) // Approved at the Session of the Government of the Republic of Armenia No.54-10 on 10 December 2015.

<https://www.cbd.int/doc/world/am/am-nbsap-v2-en.pdf>

<sup>25</sup> Development Concept "Azerbaijan – 2020: The Vision of the Future" (2012) / Approved by the Decree of the President of the Azerbaijan Republic of December 29, 2012.

[http://www.undp.org/content/dam/azerbaijan/docs/sustain\\_development/AZ\\_Vision2020\\_government\\_draft\\_en.pdf](http://www.undp.org/content/dam/azerbaijan/docs/sustain_development/AZ_Vision2020_government_draft_en.pdf)

**Second Environmental Performance Review – Azerbaijan (EPR)<sup>26</sup>.** The Second Environmental Performance Review for Azerbaijan was prepared in 2011 by the UNECE. Preventing of illegal logging and other types of deforestation in the forests, as well as *designing and planting of fast-growing forest plantations* that meet the needs of new planting systems to rehabilitate forests are found to be priorities in the sphere of forest management of the Review. The ERP recommends developing a national forestry programme to increase forest area. In the sphere of monitoring and data gathering, the ERP (*Chapter 3: Monitoring, information, public participation and education*) recommends *developing and regularly updating a modern electronic database*.

### 3. Forest programmes/strategies and biodiversity strategies/action plans.

The National Forest Policy and Action Plan was developed in 2013 according to sustainable forest management principles with support of FAO, but has not been approved yet.

**National Strategy of the Republic of Azerbaijan on Conservation and Sustainable Use of Biodiversity for 2017-2020 (NBSAP)<sup>27</sup> promotes the following** forest related actions: Activity 6.3.1.2. Preparation of action plans on *rehabilitation and restoration of forest areas*; Activity 6.3.1.6. Implementation of up to date methodologies for *inventory and monitoring of forested areas*; Activity 6.8.1.1. Defining opportunities and developing proposals for *cooperation between governmental organizations in biodiversity conservation - including: afforestation*; preventing forest fires and establishing early warning systems.

### **Georgia:**

#### 1. National development plans/strategies.

**Social-economic Development Strategy of Georgia - GEORGIA 2020<sup>28</sup> promotes** rational use of natural resources, ensuring environmental safety and sustainability. The Strategy encourages the transfer and introduction of *innovative activities and modern technologies* both at the national and regional levels. The strategy promotes the introduction of environmentally-friendly technologies and the development of a *green economy*, and highlights the importance of the *protection of forests and implementation of sustainable management practices*.

**EU-Georgia Association Agreement:** Integration into the European Union is the cornerstone of Georgia's foreign and internal policy. Under the EU Agreement, Georgia recognizes the importance of ensuring the conservation and the sustainable management of forests and of forests' contribution to Georgia's economic, environmental and social objectives.

#### 2. Environment action plans/strategies.

**Second National Environmental Action Programme (NEAP)<sup>29</sup>.** The Second National Environmental Action Programme of Georgia still plays the role as a main environmental policy and strategic document and the third NEAP is currently being developed although a draft is not yet available to the public. The *development and testing of forest information and monitoring systems*) is one of the priorities.

**Third Environmental Performance Review – Georgia (EPR-2016)<sup>30</sup>.** The Third EPR highlights that *effective monitoring of the state of forests* is crucial, to support the implementation of *sustainable and multipurpose forest management principles and practices*.

<sup>26</sup> Environmental Performance Review - Azerbaijan (2011) / Second Review // Environmental Performance Reviews Series No. 31, ECE/CEP/158, United Nations, New York and Geneva, 2011.

[http://www.greengrowthknowledge.org/sites/default/files/downloads/resource/UNECE%20Environmental%20Performance%20Reviews\\_Azerbaijan%202011%20%282nd%20cycle%29.pdf](http://www.greengrowthknowledge.org/sites/default/files/downloads/resource/UNECE%20Environmental%20Performance%20Reviews_Azerbaijan%202011%20%282nd%20cycle%29.pdf)

<sup>27</sup> National Strategy of the Republic of Azerbaijan on Conservation and Sustainable Use of Biodiversity for 2017-2020 / Approved by the Order of the President of the Republic of Azerbaijan of October 3, 2016 On Approval of "National Strategy of the Republic of Azerbaijan on Conservation and Sustainable Use of Biodiversity for 2017-2020".

<https://www.cbd.int/doc/world/az/az-nbsap-v2-en.pdf>

<sup>28</sup> Social-economic Development Strategy of Georgia - GEORGIA 2020. Approved by the Decree of the Government of Georgia #400, of 17 June, 2014.

[http://www.mrdi.gov.ge/sites/default/files/social-economic\\_development\\_strategy\\_of\\_georgia\\_georgia\\_2020.pdf](http://www.mrdi.gov.ge/sites/default/files/social-economic_development_strategy_of_georgia_georgia_2020.pdf)

<sup>29</sup> National Environmental Action Programme of Georgia for 2012 – 2016 (2012) / Chapter 7 - Forestry // Approved by the Government of Georgia - Ordinance #127 of January 24, 2012.

[https://www.preventionweb.net/files/28719\\_neap2\\_eng.pdf](https://www.preventionweb.net/files/28719_neap2_eng.pdf)

<sup>30</sup> Environmental Performance Review - Georgia (2016) / Third Review // Environmental Performance Reviews Series No. 31, ECE/CEP/177, United Nations, New York and Geneva, 2016.

### 3. Forest programmes/strategies and Biodiversity strategies/action plans.

**National Forest Concept of Georgia**<sup>31</sup> is the forest policy document of the country and it promotes *forest planning* with mechanisms for involving stakeholders in the preparation of forest management plans.

**National Biodiversity Strategy and Action Plan of Georgia for 2014 - 2020 (NBSAP)**<sup>32</sup> ensures protection and rehabilitation of unique eco-systems, diversity of species and genetic resources of Georgia through sustainable use and management of biological resources and an equitable distribution of the benefits. The NBSAP includes preparation of inventories, assessments and planning for forest landscape restoration.

**7. Knowledge Management.** Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

Knowledge sharing and the dissemination of information is one of the principal activities to support the achievement of the project outcomes and interventions at the national level. Through its technical working groups, the project will facilitate a knowledge network that brings together government agencies and civil society organizations that are engaged with engaged with forestry, land use, and restoration to learn from ongoing initiatives, share experiences, and participate in the documentation of methods and decisions. Frequent multi-sectoral engagement including workshops, trainings, and regular meetings will help ensure that experiences and expertise is shared amongst a wide range of stakeholders. Information will be shared in the form of meeting notes, technical notes, blog posts, infographics and printed media. All documentation will be disseminated to stakeholders and will be freely available on the web-portal in local languages.

## **PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)**

**A. RECORD OF ENDORSEMENT**<sup>33</sup> **OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):**  
(Please attach the [Operational Focal Point endorsement letter](#)(s) with this template. For SGP, use this [SGP OFP endorsement letter](#)).

<b>NAME</b>	<b>POSITION</b>	<b>MINISTRY</b>	<b>DATE (MM/dd/yyyy)</b>
Artsvik Minasyan	Minister of Nature Protection of the Republic of Armenia	Ministry of Nature Protection of the Republic of Armenia	03/20/2018
Goussein Bagirov	Minister of Ecology and Natural Resources	Ministry of Ecology and Natural Resources	04/09/2018
Nino Tkhilava	Head of Department of Environment and Climate Change	Ministry of Environmental Protection and Agriculture of Georgia	02/27/2018

[http://www.unece.org/fileadmin/DAM/env/epr/epr\\_studies/ECE\\_CEP\\_177.pdf](http://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_177.pdf)

<sup>31</sup> National Forest Concept of Georgia (2013) // Approved by the Parliament of Georgia, Resolution of 11 December, 2013 (1742-Is) / Official web-page of the Legislative Herald of Georgia ([matsne.gov.ge](https://matsne.gov.ge/en/document/view/2157869)), 25/12/2013.

<https://matsne.gov.ge/en/document/view/2157869>

[http://w3.cenn.org/wssl/uploads/home/National%20forest%20policy%20for%20georgia%20\(ENG\).pdf](http://w3.cenn.org/wssl/uploads/home/National%20forest%20policy%20for%20georgia%20(ENG).pdf)

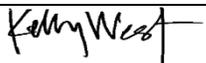
<sup>32</sup> National Biodiversity Strategy and Action Plan of Georgia 2014 - 2020 (2014) // Approved by the Government of Georgia - Decree No.343, of 8 May, 2014 “On adoption of the National Biodiversity Strategy and Action Plan, 2014–2020”.

<https://www.cbd.int/doc/world/ge/ge-nbsap-v2-en.pdf>

<sup>33</sup> For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

## B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies<sup>34</sup> and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Ms. Kelly West UN Environment/GEF Coordinator Portfolio Manager Corporate Services Division UN Environment		April 20, 2018	Ersin Esen Task Manager	+41-22-917 8196	<a href="mailto:ersin.esen@un.org">ersin.esen@un.org</a>

## C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION (APPLICABLE ONLY TO NEWLY ACCREDITED GEF PROJECT AGENCIES)

For newly accredited GEF Project Agencies, please download and fill up the required [GEF Project Agency Certification of Ceiling Information Template](#) to be attached as an annex to the PIF.

<sup>34</sup> GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF