

REQUEST FOR CEO APPROVAL

Project type: MEDIUM-SIZED PROJECT **Type of trust fund:** GEF TRUST FUND

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PART I: PROJECT INFORMATION

Project Title: Applying Landscape and Sustainable Land Management (L-SLM) for mitigating land degradation and contributing to poverty reduction in rural areas				
Country(ies):	Georgia	GEF Project ID: ¹	5825	
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01291	
Other Executing Partner(s):	Ministry of Environment and Natural Resources protection Protection of Georgia through Regional Environment Centre (REC) for the Caucasus	Submission Date: Resubmission Date:	November 2015 January 14, 2016	
GEF Focal Area (s):	Land Degradation	Project Duration (Months)	36	
Name of Parent Program (if applicable): ➤ For SFM/REDD+ ➤ For SGP ➤ For PPP	➤ N/A	Project Agency Fee (\$):	87,731	

A. FOCAL AREA STRATEGY FRAMEWORK²

Focal Area	Expected FA	Expected FA	Trust	Grant	Cofinancing (\$)
Objectives	Outcomes	Outputs	Fund	Amount (\$)	
LD-1: Agriculture and Rangeland Systems: Maintain or improve flow of agro-ecosystem	1.1. An enhanced enabling environment within an agricultural sector in support of L-SLM	1.1.Country level policy, legal and regulatory frameworks that integrate SLM	GTF	500,000	2,000,000

¹ Project ID number will be assigned by GEFSEC.

² Refer to the <u>Focal Area Results Framework and LDCF/SCCF Framework</u> when completing Table A.

services sustaining the livelihoods of local communities	1.2. Improved agricultural management 1.3. Sustainable flow of services in agroecosystems	principles developed 1.2. Types of innovative SL/WM practices introduced at landscape level 1.3. Suitable SL/WW interventions to increase vegetation cover in agroecosystems			
LD-3: Integrated Landscapes: Reduce pressures on natural resources from competing land uses in the wider landscape	3.1 Enhanced cross-sector enabling environment for integrated landscape management 3.2. Good management practices in the wider landscape demonstrated and adopted by relevant local communities	3.1. Integrated landscape management plans developed and implemented 3.2 INRM tools and methodologies developed and tested 3.3 Information on SLM (wider landscape) technology and good practices disseminated	GTF	423,484	1,652,968
Total project costs				923,484	3,652,968

B. PROJECT FRAMEWORK

Project Objective: to support integration of good Landscape and Sustainable Land Management (L-SLM) principles and practices into national policy and institutional framework to ensure adoption of economically viable practices by rural communities.

Project Component	Grant Type	Expected	Expected Outputs	Trust Fund	Grant Amount	Confirmed Cofinancing
Outcomes	Outcomes			(\$)	(\$)	

1: Policy, regulatory and institutional	TA	1. Adequate legal, policy and	1: National legal and policy framework related	GEF TF	211,738	800,000
reforms to		institutional	to Landscape and			
mainstream L-SLM		framework on L-	Sustainable Land			
practices		SLM at national	Management (L-SLM)			
practices		level	sector reviewed and			
		icvei	recommendations for			
			harmonizing existing L-			
		Evidenced by a	SLM framework			
		amended	developed. Relevant policy			
		legislation	and proposed amendments			
		framework in the	prepared and submitted for			
		agroforestry (wind	endorsement to the relevant			
		break	governmental entities			
		management), soil				
		protection and	2: Needs assessment report			
		pasturelands	addressing national institutional framework			
		management and,	(including coordination) in			
		National	Georgia to deliver positive			
		Integrated	L-SLM adaptive			
		Landscape	management elaborated			
		Management	and considered by national			
		Strategy (NILMS)	authorities (inc. MoENRP,			
		paper validated by	MoA, MoRDI, MoESD).			
		all stakeholders				
		and submitted to	1.3: Land degradation web-			
		the government of	portal with maps at			
		Georgia for	1:200,000 scale for whole			
		approval	Territory of Country is prepared and disseminated			
			for governmental			
			institutions and other			
			stakeholders			
				~		
2: Demonstrating	TA/Inv	Increased	• •	GEF TF	515,448	2,000,000
benefits of		understanding of	for Gardabani,			
introducing best L-		SLM and its	Dedoplistskaro and			
SLM practices in the		contribution to	Akhmeta municipalities			
production system		livelihoods at	established and local			
		local level	demonstration plans			
			developed.			
		Evidenced by	Recommendations on longer-term efforts made			
		approved local				
		land use plans in	2.2: A package of L-SLM			
		two municipality	demonstration activities			
		of Georgia	piloted in agricultural and			
			livestock production areas			

	(Gardabani,	(up to 6 ha per each pilot		l l	'
3: National capacity TA development and knowledge Management	Dedoplistskaro and Akhmeta) and application of L- SLM practices in those municipalities Capable national stakeholders to develop and manage SLM issues Evidenced by 100 trainee Champions	site) delivering real social	GEFTF	112,345	852,968
Subtotal				839,531	3,652,968
Project management Cost (PMC) ³			GEFTF	83,953	
Total project costs				923,484	3,652,968

C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Please include letters confirming cofinancing for the project with this form

Sources of Co-financing	Name of Co-financier (source) Type of Cofinancing		g	Cofinancing Amount (\$)
Local Government	Municipality of Akhmeta		In –Kind	250,000
Local Government	Municipality of Dedoflistskaro		In –Kind	250,000
Local Government	Municipality of Gardabani		In -Kind	250,000
CSO	REC CAUCASUS/ Executing Agency	Cash		394,568
CSO	REC CAUCASUS/ Executing Agency		In-Kind	1,023,400
CSO	Green Alternative		In-Kind	220,000

³ PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

Multilateral	EU UNDP "Sustainable Land		In-Kind	670,000
Organization	Management for Mitigating Land			
	Degradation and Reducing Poverty			
	in the South Caucasus Region			
NGO	GIS-lab		In-Kind	50,000
Bilateral	GIZ		In-Kind	495,000
GEF Agency	UNEP	Cash		50,000
Total Co-financing				3,652,968

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in \$) Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
UNEP	GEFTF	Land Degradation	Georgia	923,484	87,731	1,011,215
Total Grant Resources			923,484	87,731	1,011,215	

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

ANNEX E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
International Consultants	45,000	0	45,000
National/Local Consultants	289,600	690,000	979,600

F. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT N/A

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

² Indicate fees related to this project.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL $\rm PIF^4$

A summary of what has been changed since the PIF is provided below.

Original project design in PIF	Adjustment/improvement made at CEO Endorsement
Project Sites Only indicatively defined.	• Three municipalities out of the six identified as the most vulnerable during the NAP development process have been selected through intensive consultations with stakeholders at national and local levels. The demonstration areas are Gardabani, Dedoplistskaro and Akhmeta municipalities, all located in the Kakheti region. Local stakeholders (administrations of municipalities and local farmers) have been consulted in all six municipalities and their views and interest in the project helped shape the final choice. Selection of the participating municipalities was validated through the national stakeholder workshop held on 19 th of December 2014 in Tbilisi. Minutes of the meeting are provided in Annex K.
Project Strategy Outputs described with some indications on activities.	 Through site visits, stakeholder consultation and national validation workshop, the project strategy is now fully developed and activities are described. Feasibility assessments were completed, with due environmental and social safeguards applied to the proposed activities. Although still very much in line with the original strategy, the current outline of outputs and activities has some differences: Legislation and regulatory framework will be created in collaboration with national authorities In consultation with experts, the scale of the land degradation map has been increased to 1: 200 000. Pilot project interventions have been identified in more detail, and are to include, for example, windbreaks management, pasturelands management and measures to enhance soil fertility. The Environmental Information and Education Center under the MoENRP have been identified as the partner organization for providing training on SLM-related issues. SLM practices dissemination products have been identified and agreed with stakeholders.
Risk Analysis Cursory analysis based on assumptions and with limited stakeholder consultation.	A thorough risk analysis was carried out and the corresponding management response has undergone stakeholder scrutiny. See Annex R.
LogFrame / results framework	Consolidated 9 outputs into 7

⁴ For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question

	Streamlining carried out, and scope established to further the LogFrame into a project management instrument
Other aspects	 Indicators fully developed (Annex I) Management arrangement agreed upon (Annex H) Project consultants' TORs developed (see Annex E)

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.

At the stage of the PIF submission, the alignment of the previous UNCCD National Action Programme (NAP) to the 10 year strategic plan of the Convention was still ongoing. Following a consultative process, the Second NAP of Georgia, covering 2014 to 2022, was adopted by the Government of Georgia on December 29, 2014 (via Governmental Decree #742). The 2014 NAP deeply analyzes the existing policy and legislation framework of land resources management, assesses awareness of stakeholders at national and local levels in the field of desertification/ land degradation, and identifies the regions most vulnerable to desertification and the main factors causing land degradation in those areas. The document defines national objectives and proposes the action plan that Georgia commits to implementing by 2020. The aligned NAP addresses the international priorities identified and already established by the 10-year strategy of UNCCD (Decision 3/COP.8).

The national objectives and activities in the NAP were developed according to the strategy approved by Parties to the UNCCD (Decision 3/COP.8). In particular, it was developed through a consultative process to align their action programmes and other relevant implementation activities relating to the Convention with The Strategy by, inter alia, addressing the outcomes under the five operational objectives (paragraph 5)."

The NAP of Georgia (2014-2022) therefore forms the guidance document for the implementation of this project, tackling land degradation in priority areas for Georgia.

The NAP identifies a number of key problems and causes at national level.

- Lack of information and low level of awareness of decision makers on land degradation, desertification and preservation of soil fertility. This stipulates the low-prioritization of the issue, low interest of NGOs and media and low-prioritization of land degradation issues at the National Level.
- Gaps in the legislation regarding desertification and land degradation issues, where the liabilities and commitments of conventions are poorly integrated. The legislative norms regarding desertification and degradation and other subsequent issues in the Georgian legislation mostly appears not as a specific code of conduct, but as so called general *norm-principles*. The enforced legislative and regulating acts do not have a systemized character, and that requires the adoption of a consolidated, framework law in the field of Sustainable Land Management and integration of the principles identified by this law in the laws of agriculture, forestry and territorial planning fields.
- The semi-humid, semi-arid and arid landscapes of Georgia together cover 19,500 km2, or one third of the territory of the country. According to expected impacts from climate change, unfavorable landscape change and land degradation poses threats to 3.5% of Georgia's territory, about 2330 km² area (NAP 2014).

- According to the second national communication under the UNFCCC the climate change trends will become more visible for the landscapes of lowlands of East Georgia⁵. During the NAP elaboration process in consultations with the stakeholders the most several regions were identified as most vulnerable to desertification: Kakheti, Kvemo kartli and Shida Kartli. In these regions, desertification is more pronounced due to management factors, such as overuse and unsustainable management of pastures and forest, mismatch between demand and availability of water scarcity, lack of knowledge and application of traditional or innovation methods to combat erosion (highlighted in the tracking tool). The most vulnerable landscapes are in Kakheti, Kvemo-Kartli and Shida Kartli Regions (see Table 1).
- Without intervention against the expected climate- and management-induced land degradation threatens about 3.5% or 2330sq. km of the territory of Georgia., more than 700,000 people, i.e. 16% of the population of Georgia, will become eco-migrants (NAP 2014).

Table 1: Georgia's sites with most severe land degradation

Region	Ecosystem characteristics	Land degradation threat	Proposed counter-measure (in NAP)
Kvemo KartliArea: 370 km2Population: 500,000+	 Plains, semi-natural landscapes Precipitation: +/- 400 mm (semi-arid) 	StormsHeat wavesLess precipitationLogging	 Improved pasture management Windbreaks Research Knowledge management
 Iori upland Southern part Area: 1140 km2 Population: 50,000+ 	steppe landscapes+/- 550 mm (semi-arid)	 Storms High temperature Less precipitation Logging 	 Improved water management (including possible irrigation) Knowledge management Windbreaks
 Iori upland extreme southern part Area: 170 km2 Population: permanent and seasonal population reaches 5,000 		High temperatureLess precipitationHeat waves	WindbreaksPasture managementWater management
Extreme south-east part of Georgia Area: 90 km2 No permanent population	• 350 mm (semi-arid)	 Heat waves Less precipitation High temperature 	WindbreaksWater managementPasture management

The following national objectives are defined by the second NAP of Georgia in line with the strategic and operational objectives of the UNCCD Ten-Year Strategic Plan:

UNCCD Operational objective 1: Advocacy, awareness raising and education

⁵ There are following regions in East Georgia with semi-humid, semi-arid and arid zones: Kakheti, Kvemo Kartli, Shida Kartli, Samtskhe-Javakheti, and Mtskheta Mtianeti.

- 1. By 2020 40% of decision-makers and 30% of population are informed about the desertification/land degradation and draught issues and their link to the biodiversity and climate change.
- 2. By 2015 the detailed information on Convention is available in Georgian language, It is uploaded at the Website of Ministry of Environment and Natural Resources and consist the information on relevant decisions and documents adopted at the international forums.
- 3. By 2020 50% of the community based organizations and scientific-technical organizations awares the desertification/land degradation/ draught problems and carry out the activities in the frames of their initiatives.

UNCCD operational objective 2: Policy framework

- 4. By 2014 the NAP of UNCCD is developed and adopted.
- 5. By 2016 to combat desertification/land degradation is recognized as the one of the priority area of the country development
- 6. By 2018 in the sectoral and investment and policy documents the aspects of NAP of combating desertification are integrated.
- 7. By 2017 it is developed at least one a) joint plan or b) functional mechanism to ensure the planning and implementation of synergized activities under the UNCCD, CBD and UNFCCC

Operational objective 3: Science, technology and knowledge

- 8. By 2018 the regional monitoring system is established.
- 9. By 2018 the report is prepared for the convention according to the new guidelines.
- 10. By 2018 the self assessment is implemented on bio-phisical, social and economic interactions.
- 11. By 2020 the Website of the convention is restructerd and consists knowledge sharing thematic database in the frames of national reporting format.

Operational objective 4: Capacity-building

- 12. By 2018 Georgia has the renewed strategy on Capacity Development.
- 13. By 2020 the activities planned by Capacity development strategy are implemented.

The project aims to support progress towards of the strategic and operational objectives given in the 10 year strategy of UNCCD and second NAP of Georgia. In particular:

- To the UNCCD operational objective 1 and relevant **national objectives** (1, 2 and 3) through development of the training modules and providing trainings on SLM practices and impact indicators (project outputs 3.1 and 3.2) and via development and dissemination of knowledge products (project output 3.3).
- To the UNCCD operational objective 2 and relevant **national objectives** (**5,6 and 7**) through reviewing and amending national legislation (project output 1.1), assessing the institutional framework (project output 1.2) and developing integrated landscape management strategy paper (project output 1.3).
- To the UNCCD operational objective 3 and relevant **national objectives** (8, 10) through preparing a land degradation web-portal (project output 1.4), via the development of vulnerability profiles for Dedoplistskaro and Akhmeta municipalities and preparing land use plans (project output 2.1), and through implementation of the SLM pilot project (project output 2.2).

The Third National Report to UNCCD

According to the 3rd national report of Georgia to the UNCCD, Desertification is a significant ecological problem for Georgia, which is an agrarian country with insufficient agricultural lands. However, it is limited in geographical area. The forms of land degradation such as deforestation, wind and water erosion, landslides, overgrazing, soil exhaustion, soil contamination and others are spread all over the country and are accompanied by socio-economic results. Because of this difference in spatial extent, desertification is considered within a broader context of land degradation and problem of sustainable land management.

The 3rd report also focuses on the most sensitive areas to desertification in Georgia are following regions: Shida and Kvemo Kartli, parts of Kakheti (Dedoplistskaro, Signagi and Sagarejo regions) where desertification processes are activated because of unsustainable use of land resources (improper irrigation and cultivation, overgrazing, deforestation) and climatic factors. Desertification processes are intensified over almost 3000km² of area including Shiraki, Eldari, Iveri, Taribana, Naomari, Ole, Jeiran-Choli valleys, mountain ranges and plateaus dividing them and the most part of Kakheti range hill-side. Desertification zone in Georgia is starting at 300-400 meters above the sea level and is closely bordering with "North savannas". The desertification process is very intensively presented on the area of 119 041,5 hectares of land in Dedoplistskaro region, 46700,0 hectares of area in Signagi region, 47000, 0 hectares of area in Sagarejo region, 32000,0 hectares of area in Gardabani region and 30561,0 hectares of area in Marneuli region. Active desertification is also noticed in the southern part of Georgia (Akhaltsikhe depression) and Shida Kartli (Kaspi region), where during the last decade the erosion process caused by the wind became stronger due to the destruction of windbreaks, increased frequency of droughts, deficit of precipitation and increased temperature.

Land degradation in Georgia is mainly conditioned by climatic and topographical peculiarities, activity of geo-dynamic processes, uncontrolled forest cutting and improper agricultural practices (over-pasturing, intensive cultivation, plough of slopes, extraction of minerals through open pit mining).

According to the recent data of the Ministry of Agriculture of Georgia (3rd National Report to UNCCD, 2014) the low-yield agricultural lands occupy a large proportion of total terrestrial area:

- Saline and brackish soils 205,0 thousand hectares (6, 7% of the whole arable lands);
- Acidic 300,0 thousand hectares (11%);
- Marshy soils -210,0 thousand hectares (7,3%); and
- Eroded soils 1 million hectares (33%).

This is aggravated by the impoverishment of the soil from the nutrition substances necessary for vegetation and the trend of the reduction of humus - the main indicator of fertility - in almost all types of soil.

Plans and national communications under the UNFCCC and CBD are also relevant to L-SLM in Georgia, particularly the objectives related **land use**, **land change and conservation of carbon stock through forest restoration** for UNFCCC, and **to habitat conservation** for CBD (see following Table).

Table 2: Georgia's plans and communications under UNFCCC and CBD

LINECCC	Third National Communication to UNFCCC
UNFCCC	In 2012 Georgia started to work on its Third National Communication (TNC) to UNFCCC ⁶ , in which an importance is placed on the impacts of climate change underway in Kakheti – one of the

⁶ The Second National Communication of 2009 is posted online [Link].

uniquely vulnerable regions – on the economy of the region and natural ecosystems. The impact of climate change has been studied on agricultural sector of Kakheti⁷. In Georgia's Second National Communication (2009), the impact of climate change on economy and natural ecosystems was analyzed as a case study for one part of Kakheti – Dedoplistskaro municipality, together with other vulnerable regions of Georgia. However, taking into consideration, that the territory of municipality compiles only 22% and population – 8% of Kakheti region, the results provided in the previous report do not reflect the problems facing the whole region. All eight municipalities of Kakheti were involved in the research starting in 2012, still to be published. A multi-criteria analysis methodology was used to generally assess vulnerability of agricultural sector to the climate change in all eight municipalities of the Kakheti Region. In total 27 parameters were assessed. Vulnerability was assessed in three areas: the impact of climate change on agriculture, the sensitivity of the agricultural sector to climate change and the population's ability to adapt to climate change. Assessments revealed that climate change (described by the above-mentioned three parameters) was most of all detected for Telavi, Dedoplistskaro and Kvareli municipalities and the least in Lagodekhi, Sagarejo and Gurjaani municipalities. Telavi, Sagarejo and Akhmeta municipalities are the most sensitive to changes in the parameters of soils and biodiversity. The least and equally sensitive are Sighnagi and Dedoplistskaro. As for the adaptation potential, Kvareli was assessed as having the weakest adaptation potential, Lagodekhi and Akhmeta have the similar potential. Dedoplistskaro was evaluation as having the highest adaptation capacity (i.e., it has the largest population and infrastructure is the most developed), followed by almost identical scores by Telavi and Sighnagi. A joint estimation of all three parameters revealed that the agricultural sector is the most vulnerable to climate change in Telavi (0.71), followed by Kvareli (0.67) and Akhmeta (0.63). Lagodekhi agricultural sector turned out to be the least vulnerable in the current conditions. In Kakheti, as well as in other regions of the country, climate change takes place against the background of serious anthropogenic loading on soils, which further exacerbates the negative impact of these changes. The impact of climate change on agricultural lands is especially noticeable in Dedoplitskaro, Sighnagi, Sagaredjo and Akhmeta municipalities and are mainly determined by the strong spring winds (Dedoplitskaro, Sighnagi), droughts (Sagarejo) and river floods (Akhmeta, Kvareli). Soil salinization (Dedoplitskaro, Sighnagi), which seems to be indirectly related to climate, but is closely linked with droughts, takes place. At present, according to rough estimates, 27 000 ha of agricultural land, which is 5% of the total agricultural land, is alfunctioning, washed off and eroded. These are mainly pasture and arable areas. Land degradation is a serious problem especially for two municipalities (Dedoplitskaro and Sighnagi). Basically, we are dealing with erosion by wind and soil salinization. The latter is often caused by excessive irrigation because these areas are quite dry and droughts are frequent here. By taking these processes into account, the major events without which we cannot talk about agricultural profitability in these municipalities, are the windbreak restoration-planting, provision of these municipalities with modern irrigation systems (which are linked to the soil moisture and automatically adjust the volume of water) and systematic implementation of necessary irrigation measures for alkali soils.

The analyses of climate change between the periods 1961-1985 and 1986-2010 demonstrated that average annual temperature in Dedoplistskaro is increased by 0.7 0C, and compared with the period of 1951-1960- by 1.2 0C. Annual total precipitation has insignificantly decreased between the mentioned periods (5 mm, -1%). Seasonal sums of precipitation are decreased by 22%, on the background of which frequency of one month agricultural draughts has increased 3 times and of 3 months drought – 2 times. At the same time the recurrence of heat waves has increased. Thus, summer in Dedoplistskaro becomes considerably hotter and relatively drier.

Analyses of changes of climate elements between the periods 1961-1985 and 1986-2010 in lower zone of Akhmeta municipality has shown the increase of mean annual temperature by 0.5 0C, and

⁷ UNDP Impact of Climate Change on Agricultural Sector in Kakheti [Link].

compared with the period of 1928-1960 by - 1.2 0C. Warming takes place in all seasons is being the highest in summer (+1.0 0C). Between two mentioned periods annual total precipitation has reduced by 41mm or by 5%, and compared with period between 1928-1960, it has decreased in 62mm, which compiles 8% of the average of starting period. According to information of the municipality administration, natural hazards harming the population of Akhmeta municipality the most, are mudflows and floods, that seriously damage agricultural plots, houses, irrigation systems and other public infrastructure significantly affecting agriculture.

In order to avoid problems anticipated in relation with climate change, the still-unpublished TNC recommends *inter alia* implementing the following activities in the Dedoplistskaro municipality:

- Restoration-construction of windbreaks for protecting agricultural lands from droughts and winds and decreasing erosion by wind;
- Planting of artificial forests for the rehabilitation of soil damaged by wind erosion and protection of surrounding areas from drought;
- Arrangement of windbreaks and forest small woods for suspension of erosive processes on mountain slopes, forest groves, territories surrounding villages;
- For improving soil quality, dissemination of perennial crops, for instance *sainfoin* is recommended, which grows well on degraded soil, survives through and enriches soil with nitrogen. This is why it is a good predecessor to wheat. In cattle farming it is used for preparing sappy forage with silo and haylage. It is mowed twice a year and hay produced from it is quite highly productive and expensive. Introduction of this culture in practice and its multi-use will decrease expenses of the farmers and will bring more profits to them.
- Testing of various capacity, ecologically advisable soil-processing aggregates (chiselling, combined aggregates, unploughed plots) in concrete natural climate conditions and introduction of the best ones in practice (across the municipality);
- Testing of drought resistant annual and perennial crops, selecting and organizing of their seed production in the municipality. Testing and identification of autumn, drought-resistant cultures and varieties, research-introduction of their varietal agro-equipment for nonirrigated, as well as irrigated, plots; and;
- Development of the pasture management plan for the municipality.

In order to avoid problems anticipated by climate change, it is necessary to implement the following activities in the Akhmeta municipality:

- Promotion of the development of cattle-farming as a priority high-profitable sector.
- Restoration of windbreaks and planting of new ones for preventing soil erosion by wind
- (mainly on pastures) and for maintaining moisture during severe droughts;
- Elaboration of the pasture management plan for the municipality.

The data gathered in preparation of the second and draft third national communications of Georgia to UNFCCC will be used in the implementation of this project.

CBD

National Biodiversity Strategy and Action Plan (2014-2020)

In May, 2014 Georgia adopted its updated National Biodiversity Strategy and Action Plan (NBSAP, or NBSAP-2) for 2014-2020. **Soil degradation, erosion and overgrazing** are recognized by NBSAP as factors that cause the degradation of agricultural ecosystems and natural grasslands. The process of developing the NBSAP identified that current agricultural policy fails to promote best practices (e.g. sustainable use of chemicals, modern irrigation and land cultivation technologies), use of agro-ecological techniques such as landscape planning, windbreaks, crop rotation, soil filtering, etc. There are no programs for restoring heavily eroded plots. The lack of institutional and legal framework for the sustainable use of common pastures has resulted in

unsystematic and unorganized grazing on those lands. The degradation of natural grasslands has been caused by (i) the lack of knowledge among livestock farmers, (ii) the fact that many pastures were privatised or leased out without adequate planning and a targeted approach, and (iii) the fact that there are no control mechanisms of pasture management. At present, there is a lack of regulations and mechanisms for the promotion of sustainable grazing and the implementation of pasture improvement measures. Consequently, improvement of the management of agricultural ecosystems and ensuring sustainable management of 70% of grasslands by 2020 are national objectives set by NBSAP. In this regard the following measures should be implemented by 2020: (i) Introduce amendments to the legislation on agriculture that ensure a reduction of pollution from agriculture, sustainable functioning of agro-ecosystems and the conservation of agro-biodiversity, as well as to provide for the sustainable management of community pastures and define the responsible entities; (ii) Conduct three restoration pilot projects in the most contaminated/degraded pastures and six pilot projects in the areas with the most contaminated/degraded soils in selected municipalities, (iii) Elaborate a scheme for the integration of management methods related to agroecosystems and natural grasslands into regional strategic documents and municipal annual work plans. Therefore, through successfully implementation of several activities (pilot projects in windbreaks rehabilitation and pasturelands management, amendment of legislation, development of local land use plans) the project will also contribute to NBSAP.

The project will also contribute to the following United Nations Development and Aids Framework (UNDAF 2011 – 2015) thematic areas, outcomes and targets:

UNDAF Thematic Area 1: Poverty Reduction, **Outcome 1**: Inclusive development and poverty alleviation promoted through International, national and local economic policies, including in the area of trade and investment, Target 3: Producers in selected productive sectors are fully compliant with international standards (ISO, EU and ILS in particular).

UNDAF Thematic Area 2: Democratic Development, **Outcome 5**: Institutions develop policies based on reliable data and clear, fair and participatory process; Target 2: Timely, relevant and reliable national statistics used for policy development.

UNDAF Thematic Area 3: Disaster Risk Reduction, **Outcome 1**: Disaster risk reduction (DRR) is a national and local priority with an established, strong institutional basis for implementation. Target 2: Inclusive (cross-sectoral) National Platform for DRR established, operational and functioning. **Outcome 4**: Underlying disaster risk factors are reduced, focusing on sustainable environmental and natural resource management, Targets: 1. Knowledge on and scale of use of sustainable environmental and natural resource management practices and tools enhanced and 2. Enhanced capacity of the Government to plan for and implement food security schemes.

A.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

No changes since PIF approval.

A.3 The GEF Agency's comparative advantage:

No major changes to UNEP comparative advantages as Implementing Agency since PIF approval. However, since 2014 UNEP, through it Regional Office for Europe is working with Georgia as a pilot country on Green Economy (GE) and Sustainable Consumption and Production (SCP). This support include i) raising awareness on GE and SCP approaches and their economic, environmental and social benefits, ii) reviewing overall progress in resource efficiency in the region, iii) stocktaking progress in GE and SCP policy development, and iv) exchanging experience and learning success stories from the European countries

A.4. The baseline project and the problem that it seeks to address:

This section has been updated since the PIF, based on the findings during the elaboration of 2nd NAP of Georgia to combat desertification, more in-depth review of the literature and thorough consultations conducted during project preparation.

The problem: Georgian land resources are limited; the total area of country is 69,700 km2, including only 15% cultivated land and 70% natural-economic land use (forests, bushes, meadows and pastures). Successful management of the land and soil resources are essential for the country. Yet due to specific climatic and landscape conditions as well as improper agricultural practices, more than a third of agricultural lands are in the process of degradation, erosion, pollution, and damage of soil structure and nutrient lost. One form of land degradation of concern is desertification, which results in the progressive loss of plant cover in dry steppes and semi-deserts. Around 4% of the country (3000 km²) is vulnerable to the desertification process (NAP 2014). This is mainly in the Shiraqi, Eldari, Iori, Taribani, Naomari, Ole and Jeiran-Choli valleys (as detailed in section X4).

Land degradation continues to be a major problem in Georgia. According to data of the Ministry of Agriculture of Georgia, 60% of the agricultural lands in Georgia were of medium or low productivity. Overgrazing and uncontrolled grazing, poor forest management and loss of forest cover, unplanned urban sprawl are major drivers for land degradation in Georgia. At the same time, agriculture employs 53% of the Georgian workforce (National Statistics Office of Georgia) and has been identified by the Government of Georgia as a main vehicle for rural development. Recent research finds that small-scale farming is dominant, with 82% of these small farms producing for consumption only. The current government programme, "Government Program for Strong, Democratic, United Georgia,", states that "Development of agriculture will be one of the main priorities of the government of Georgia, which will be guaranteed by clear rural and regional policy and increasing of financing of agriculture. However, within agriculture, reduction of genetic diversity, land degradation due to salinization and soil erosion are some of the many issues that challenge the long-term sustainability of the agricultural sector. Hence there is a risk of reducing long term crop yields if incentives are not provided to promote, for example, limited pesticide and chemical fertilizer use, biological pest control, soil conservation techniques, water use efficiency, food safety, crop rotation, and farm diversification. The agriculture sector is threatened by land degradation, as it relies on processes such as relying on nutrient cycling and pollination services of insects and bees to produce food.

According to Georgia's third national report (2013-2014) on the implementation of the UNCCD (reviewed in detail in section A.1), the scale of land degradation is alarming. It is a significant problem for almost all Georgia including the Western Georgia and high mountain regions. According to the latest data¹⁰, about 35% of agricultural lands are degraded. Land erosion type and causes, which has significantly activated during the last years, is the most representative problem related to land degradation. More than 1 million hectares of land is erosion stricken from which

⁸ European Commission. 2014. The Gender Gap in Agriculture in Eastern Europe - Results of Recent Country Rural Gender Assessments [Link].

⁹ UNEP 2013. TEEB scoping study for Georgia [Link].

¹⁰ Georgia's 3rd National Report to UNCCD, 2014. [Link]

plough-lands constitute 380,000 hectares, pasture lands and hayfields constitute 570,000 hectares and Black Sea coastal line 87,000 hectares. In arid and semi-arid zones of Eastern Georgia about 105,000 hectares of plough-lands in 18 administrative regions undergo erosion caused by winds. 59,220 hectares of soil is seriously saline, on average -54 340 hectares¹¹. Overall area of humus-sulphate soils requiring melioration (land-reclamation) constitutes 15 thousand hectares.

Location-specific studies have shown that global warming and consequent change in climate will lead to desertification to most territories which are currently used as a pastures, what will cause expansion of desert vegetation species to the higher zones, whereas overall trend will be change of mezophilic vegetation to xenophilic one, which is information of great interest for management policy of pastures¹².

Furthermore, Georgian habitat is being degraded, contributing to loss of biodiversity. During last decades biodiversity of Georgia has significantly reduced. This is caused by both anthropogenic and natural factors, as loss of habitats, fragmentation and degradation, illegal hunting and fishing, introduction of new species, non-sustainable use of natural resources.

The lack of efficient land management policies, a weak regulatory framework, limited access to appropriate information and technology, weak institutional capacities and a lack of cooperation between various stakeholders along with a high rate of natural disasters are causing significant problems in land management sector and for overall ecosystem integrity. *Regarding natural disasters, combating land degradation contributes to ecosystem-based disaster risk reduction*¹³.

From the management point of view, one of the major problems Georgia is facing today is an absence of comprehensive and integrated approach in land management sector. In addition, an in adequately targeted legal framework sometimes is the source of additional "conflicts" with the national strategy and policy packages.

Research is also lacking. An exception is the location-specific research that was recently carried out on "Grassland Carbon Stock Calculation and Preparation of Water Balance Model for Vashlovani Protected Areas" within the scope of the project "Sustainable Management of Pastures in Georgia to Demonstrate Climate Change Mitigation and Adaptation Benefits and Dividends for Local Communities". The project is funded by EU and implemented by UNDP Georgia. The survey was implemented by GIS-lab in collaboration with in Ecological Agriculture and Nature Conservation Laboratory of Agricultural University of Georgia. Since the aim of the project is the rehabilitation of pasturelands and the introduction of sustainable grazing practices in Georgia on the basis of Vashlovani Protected Areas (VPAs) example, activities implemented during the survey aimed at carbon stock inventory, general soil fertility assessment and water balance modelling of VPAs pastures. Information derived from the survey is of great importance for future management planning and outlining rehabilitation areas and measures. Based on data, maps and GIS models of survey soil fertility, carbon stocks for present time were evaluated and overgrazing regions outlined¹⁴.

The "Business As Usual" Scenario: Georgia has shown clear drive to combat land degradation and improve land management system by moving forward with the establishment of a strong baseline, which includes accession and implementation of most pertinent international agreements, adoption of several related policies and laws (National Environmental Action Programme of Georgia / NEAP 2012 –2016¹⁵, National Action Plan of Georgia for Combating

¹¹ Soil salinity is measured as the salt concentration of the soil solution in terms of g/l or electric conductivity (EC) in dS/m. The relation between these two units is about 5/3 : y g/l => 5y/3 dS/m.

¹² UNDP 2014. Grassland Carbon Stock Calculation and Preparation of. Water Balance Model for Vashlovani Protected Areas. [Link]

¹³ IUCN. What is Eco-DRR? Training Course on Environment and Disaster Risk PEDRR Reduction for Sustainable and Resilient Development. [Link]

¹⁴ Also water balance distribution was determined for current and future businessas-usual scenarios (2014 and 2070 years).

^{15 [}Link]

Desertification / NAPCD, etc.; described in Section A.3). However, the current national SLM baseline, while strong and promising, is still largely sectional and un-coordinated and enjoys limited technical backstopping. Without GEF-supported intervention, the pace of land degradation and desertification would be expected to continue apace. It is unlikely that considerable progress toward improving the understanding and broader adoption of effective Landscape and Sustainable Land Management (L-SLM) would be made, or made in time to prevent irreversible degradation and impacts on livelihoods.

Note on terms used

Ecosystems can be defined at a variety of scales - a **single site**, a landscape, a region, a continent. At all scales, they are dynamic - constantly changing from one condition to another. **Integrated Landscape Management** is an approach to ecosystem management that involves the consideration of broad scale interconnected ecological systems that acknowledges the **whole scope of an environment**. EcoAgriculture has identified dozens of terms that refer to this type of land and resource management, which aim to integrate food security, agriculture, ecosystem, human well-being and other values at a landscape scale ¹⁶. **Landscape level approaches to land management, forestry, conservation and other types of ecosystem management are gaining traction as the limits of site- or region-only interventions are recognized.**

Sustainable Land Management (SLM) is "the adoption of land use systems that, through appropriate management practices, enables land users to maximize the economic and social benefits from the land while maintaining or enhancing the ecological support functions of the land resources"¹⁷. SLM is based on four common principles:

- Land-user-driven and participatory approaches;
- Integrated use of natural resources at ecosystem and farming systems levels;
- Multilevel and multi-stakeholder involvement; and
- Targeted policy and institutional support, including development of incentive mechanisms for SLM adoption and income generation at the local level.

Landscape and Sustainable Land Management (L-SLM) is the harmonization of these approaches, with an emphasis on combating land degradation and reducing rural poverty.

The business-as-usual scenario implies that national plans and policies continue not to reflect holistic land management principles and practices. There would remain a failure of national and rural decision-making frameworks to provide adequate legal parameters and tools to support SLM Current policies result in disparate organizations responsible for various land management sectors making unilateral decisions that lead to uncoordinated approaches. Consequently, "on the ground" management decisions made by responsible communities and resource users do not benefit from the guidance of coordinated, national strategies. **Capacity and information pathways still would not exist to provide rural community members with examples of alternative, sustainable methods of resource use.** Remote communities and resource users now responsible for many land management issues still would not have satisfactory access to the information and tools necessary for informed decision-making. As a result, community land use plans and other decision-making tools intended to address land degradation fail to reflect L-SLM principles and practices.

¹⁶ EcoAgriculture. 2013. Ecoagriculture Policy Focus [Link].

¹⁷ TerrAfrica 2005 [Link].

In the business-as-usual scenario, public, civil society, private and donor investments may be poorly targeted, opportunities missed, and time lost in the effort to develop sustainable, climate-adapted rural landscapes. In the meantime, single-objective strategies are likely to continue to be pursued, resulting in large land areas devoted to uses that provide some specific benefits to rural population but, overall, provide sub-optimal bundles of food production, ecosystem conservation, livelihood, and economic development benefits. Multiplied across entire regions and the globe as a whole, continued use of such single-objective approaches will result in a failure simultaneously to achieve societal mandates related to increasing food production for a growing population, reducing poverty, maintaining key ecosystem services, preventing species extinction, and avoiding catastrophic climate change effects. To the extent that such sectoral development strategies do not yield the goods, services, and public benefits from rural landscapes on a sustained basis that stakeholders expect, the current increase in development assistance for agriculture is likely to be called into question.

Barriers analysis: The above mentioned factors underline the importance of reviewing the country's existing policy and regulatory framework related to the management of land resources, that will serve as important guidance to overcome existing barriers to mainstream L-SLM activities. The following key barriers identified by Georgia's 2014 NAP will be addressed by the project:

1. Lack of an adequate legal, policy and institutional framework on SLM at national level

Georgia has not adopted a consolidated, framework or law on land resources management (like a Land Code) that would systemize the broad outlook of the norms related to the SLM. Provisions in this field are provided by several laws, but they do not have a systematic and consistent character, and do not reflect a joint approach to the sustainable land management (SLM) in the country. The legislative norms regarding the desertification/land degradation and other related issues in the Georgian legislation mostly reflects no specific rules, but the rules of the so-called principles of the general provision, and this lack of coherence represents a significant barrier to the coherent execution of SLM.

Existing legal framework: The key elements in existence are the *Act on the Protection of Soil* (1994), on *Act on the Conservation and Restoration-Improvement of Productivity of the Soil* (2003), *Act on Privatization of the Land, on Property of the Land That Has Agricultural Purpose* (2006). These legal acts do not have sufficient legal mechanisms to ensure their application. They only establish prohibited norms, do not state the rules for achievement of the laws, and are not enforceable. The legal framework relating to SLM is therefore inactive. There is no the essential bylaws on state supervision of soil protection and use.

Georgia is a signatory to UNCCD and other relevant principles and frameworks, with an agreed NAP, yet these are poorly integrated into national legislation related to desertification/land degradation. This current lack of a comprehensive and systemic legislative framework for SLM is expected to be overcome with **the adoption of a modern law on land management**.

NEAP of Georgia (2012-2016) also emphasises that the national legislation in the field of land resources management needs to be reviewed and renewed due to establish the relevant legislative base for Sustainable Land Management through integrating relevantly the interests of different sectors and establishing new partnership capacity development. According to the NEAP the long-term objective for land resources management is applying the best agricultural practice through SLM practices. To achieve this long-term objective it is necessary to change the existing land management to L-SLM to support the spatial planning, zoning (which ensures the best use of land resources), and sustainable benefits from land via optimizing the environmental, social and economic incentives. Also there should be considered such issues as conservation of territories, the rights of private properties, and the interests of local populations and communities.

SLM issues are currently reflected weakly in strategic documents, such as the *State Strategy for Regional Development* of Georgia (2010-2017) and *Agricultural Strategy*. Little attention is given to SLM in the separate regional development strategies, particularly Kakheti¹⁸, Shida Kartli¹⁹ and Qvemo Kartli regional development strategies (all spanning 2014-2021). Furthermore, these regions are those that are very vulnerable to the desertification and land degradation processes (a combination of risk/likelihood of degradation and their ability to respond and manage).

The project is also in line with the following key National Strategies:

- 1. According to the **National Report on the State of the Environment of Georgia** (2007-2009) erosion and desertification are the most prevailing forms of land degradation in the country. These data from the Ministry of Agriculture (2006) indicate that, around 60% of agricultural lands are of medium or low productivity. Soil fertility loss is accelerated by improper use of agricultural lands. The report recommends the identification of vulnerable areas and the preparation of special action plans to restore land degradation problems. In addition, the programme defines special measures to maintain biodiversity based on the pressures associated with desertification and proposes the development of sustainable use programs for agricultural sector.
- **2. National Action Plan to Combat Desertification (NAPCD),** developed and approved in 2003, which identifies the priority regions facing the risk of desertification, defines the main factors contributing to desertification in these areas, and determines short- and medium- actions. Georgia has also submitted four national reports on the convention implementation.
- **3. Second National Communication under UNFCCC** completed in 2009 identified arid and semi-arid ecosystems as the most vulnerable and indicated the importance of implementing innovative adaptation measures and sustainable agricultural practices in the rural areas of high biodiversity values, particularly agrobiodiversity. The Second National Communication outlines the rehabilitation of degraded pastures and agricultural lands as well as the implementation of proper land management strategies as well as the introduction of drought resilient agricultural and forestry practices in a long term strategy.
- 4. According to the **Agricultural Development Strategy** (2012-2022) land degradation is one of the most important problems in agriculture management sector in Georgia. Soil erosion is caused by both natural factors and anthropogenic influences including unsustainable land management. The decrease in the fertility of land resources is caused by improper management of pesticides and fertilizers, problems in drainage systems and uncontrolled management of waste as well as by natural disasters intensified by climate change. The document identifies the following measures to be addressed in order to improve the situation. This includes: proper management of fertilizers and pesticides, waste monitoring, improvement of melioration infrastructure and implementation of early warning systems for natural disaster management.
- 5. According to the document on the Assessment of Georgia's Risks for the Year 2010-2013 (adopted by order of President of Georgia in September 2010), natural disasters, land degradation and erosion processes are also considered as risk-factors, which can have negative impact on country's security.
- 6. The purpose of **National Implementation Plan (NIP) for 2007 -2022** adopted in 2010, is to develop and to improve the most effective POPs management strategy with implementation means of a sustainable land management policy while securing human health and cleaning environment.

The land resources management institutional framework needs to be improved. Competences in land resources management are attributed to several institutions. The main competences at the central institutional level are distributed between the Ministry of Environment and Natural Resources Protection (MoENRP) and the Ministry of Agriculture (MoA). The Ministry of Economy and Sustainable Development (MoESD) leads the privatization process of the lands that are under state ownership. The local municipalities are also engaged in land resources management. However the

¹⁸ Kakheti Regional Development Strategy 2014-2021 [Link].

¹⁹ Shida Kartli Regional Development Strategy 2014-2021 [Link].

functions of land management are not clearly distributed between various institutions and levels, further there can be overlapping of the functions between institutions and levels. There is no mechanism for information sharing. Effective coordination mechanism between the different institutions is a necessary precondition for sustainable land resources management. In fact, effective planning and management of land use is hindered by the fact that there is no strong state institution responsible for all these fields. The Georgian institutional framework is still evolving and it would be opportune to define further the repartition of competences and to elaborate some procedures with the aim of improving coordination between the various public bodies and the stakeholders.

The project will contribute to the implementation of the plans or actions under relevant conventions, as applicable.

2. Limited understanding of SLM and it contribution to livelihood at local level

The lack of information and awareness of decision-makers and the public is the one of the reasons for weak integration of sustainable land management issues in the policy and strategic documents. The information on land degradation, and desertification issues is not available to the public. Formal and informal (outside classroom) education level is low. The NGOs and CBOs are less interested with the problems of land degradation and desertification. The above issues rarely broadcasting by media.

3. National stakeholders are currently not capacitated to develop and manage SLM issues

The decision-makers, as well as other stakeholders do not have relevant capacities in the field of SLM. There is no capacity for professional training or qualifications this field. There are also no manuals to support the planning of SLM. There is lack of capacity of local government to develop land use plans which will support the optimal use of existing land resources and mitigate the land degradation process.

The project's pilot municipalities are characterized by socially vulnerable communities with low income, mostly dependent on agriculture and are affected by climate change and land degradation.

Local authorities and population expressed readiness to support and to be involved into the project activities.

Table 3: Threats, their root causes, solutions and barriers matrix

Threat/impact	Root Causes	Management challenge/barrier	Solutions or Barrier removal activity
Absence of comprehensive and integrated legal approach in land management sector	L-SLM is a new technical approach, so legislation not caught up	Irrelevant legal framework sometimes is the source of additional "conflicts" with national strategy and policy packages	Development of an adequate legal, policy and institutional framework on L-SLM at national level (Component 1)
Knowledge and understanding of desertification/land degradation-induced risks and potential opportunities for L-SLM remains limited, esp. in the NAP's priority areas	Limited understanding of magnitude of land degradation-related risks at sub-national levels of decision making and politics in Georgia Limited understanding of resource dynamics	Community land use plans and other decision-making tools intended to address land degradation fail to reflect L-SLM principles and practices Absence of successful SLM demonstrations No vulnerability profiles	Increase understanding of L-SLM and it contribution to livelihood at local level via vulnerability profiles, local land use planning, and demonstration projects / proofs-of concept L-SLM interventions (Component 2)

	 (natural and social assets) in most vulnerable areas Lack of understanding of SLM / resilient sustainable development options 	providing evidence base for dialogue and action • Absence of local community land use plans, harmonized to other policy frameworks and developed according to local needs and realities	The project's Atlas of Desertification in Georgia will go some way towards address the lack of awareness.
Limited capacity to respond to the desertification/land degradation threat / L-SLM opportunity at national and subnational levels	 Lack of capacity of local government to develop land use plans Limited guidance from national level on SLM (or L-SLM) 	 No professional training available in Georgia on L-SLM Absence of manuals guiding L-SLM implementation in Georgia 	Development of a cadre of capable national stakeholders to develop and manage L-SLM issues, capacitated with critical training and key tools (Component 3)
Communities already vulnerable, low income, dependent on land-based resources for their livelihoods			

The long-term solution proposed through the project design will address the identified barriers (see section A.5). The project theory of change builds from the current reality: that there is limited available information on Land Degradation (LD) and few working examples of Landscape and Sustainable Land Management (L-SLM) today in Georgia, hence limited interest in rolling out L-SLM. During the PPG phase, the project emphasis was refined to prioritize the subnational level - i.e. the 3 municipalities that the project would like to influence - and from there identify ways to upscale L-SLM to reach the remaining 64 municipalities, and nationally through an appropriate framework.

The following table describes the intervention logic of the project, including assumptions:

Key questions	Intervention	Reasoning	Assumptions	Outputs (Cross- ref to project output)
Where is LD happening in Georgia? Where are the priority areas for intervention? How can policy/decision-makers access this information?	Land degradation web portal	Currently limited information is available on the extent of LD to Georgia's policy and decision-makers. Basic information on land degradation required to inform priorities and interventions. A web portal is a more easily updated and readily accessible format than e.g. a printed Atlas or PDF.	Assumption that internet connectivity and computing power remains so that the portal remains accessible incountry.	Output 1.3 (formerly 1.4)
What does L-SLM look like in the Georgian context? How can Georgians see the potential of L-SLM efforts?	(4 Ha /demonstrate economic viable L- SLM approaches at sub-national level	As the demonstrations are aiming to influence beyond the 3 municipalities to the remaining 64 and at national level, considerable emphasis will be places on communications of project results. A communications plan will be developed by the project manager and validated by municipal partners in the project.	municipalities - expected through the	Output 2.2
At the critical municipal level, how can L-SLM efforts best be targeted?	Municipal vulnerability profiles	Apart from the prioritisation of municipalities indicated by the recent NAP development process, there is currently no targeting of L-SLM efforts	Vulnerability to LD impacts will be largely influenced by gender, access to livelihood opportunities, age, education, and other factors, to be disaggregated	Output 2.1

		based on needs. At sub-national level, vulnerability profiles will help to ensure resources are spent where they can have the most impact.	within each vulnerability profile.	
What kind of pilots or demonstrations will generate the most benefits to the municipalities? Which will be most useful to communicate the benefits of L-SLM within Georgia?	Municipal L-SLM demonstrations (plans and implementation)	to generate interest in L-SLM, show the potential benefits of the approach, better understand how L-SLM interacts with the policy and legal framework. The demonstrations may cover (e.g. in agroforestry / windbreak management, pasture management, soil protection, based on the findings of the vulnerability plans and subsequent proposals from local stakeholders, in conjunction with technical guidance	Stakeholders will be the ones carrying forward the project activities, and therefore are key in the design of activities. Technical support will be required to develop L-SLM demonstration activities, on the basis of identified priorities. Additional cofinancing will be required to finance demonstrations - a longer timeframe for the project will take into account the time demands of establishing relationships and negotiating the necessary agreements amongst partners. Trust can be a major barrier to collaboration, and takes time to establish. As much as possible, the project will be build on existing relationships and seek to up-scale promising micro-efforts.	Output 2.1
What framework is required for Georgia to be able to roll-out L-SLM across all its municipalities and nationally?	Stocktaking and analysis of Georgia's policy and legal framework relating to L-SLM	and recommendations for harmonizing existing L-SLM framework developed.	The legal and policy framework provide incentives and disincentives for the adoption of L-SLM. An adequate framework will not in itself generate action. Pilot examples (in Component 2) are critical to success through momentum of L-SLM In Georgia.	Output 1.1
How can information about L-SLM be shared effectively? How will the learning from the project contribute to further innovation? How will the remaining 65 municipalities replicate the experience?	Knowledge sharing	The project will develop a plan and mechanism for knowledge sharing at national and sub-national level, emphasising the communication of results from the demonstration sites and promoting L-SLM innovation.	Knowledge sharing mechanisms will need to be well-tailored to the unique project circumstances. Support from Georgian partners well-versed in communication approaches and exchange of knowledge should be drawn upon.	Output 3.2 (former Output 3.3)
Who will support the roll-out of L-SLM in Georgia? How will capacity needs be sustained?	Training a cadre of 100 L-SLM champions & Georgian L-SLM capacity plan	is a major emphasis of the project. During its inception phase, the project will undertake capacity assessment and develop a sound "exit strategy" that	REC Caucasus will be exposed to state of the art knowledge on L-SLM, establishing links and knowledge sharing with ongoing projects including e.g. UNEP's "Ecosystem Management of Productive Landscapes: development and promotion of the landscape approach to increase the sustainability products and improve water, energy and food security through Ecosystem Management" (2015-2017). Capacity - and resources - will be needed to sustain the results in the long run beyond REC Caucasus, particularly in government and civil society at various levels.	Output 3.1
How can local investments in L-SLM be sustained? How will the demonstration results be sustained at the municipal/ community level - by whom and	Local land use / community management plans	The project will provide recommendations on the development of local land use and community management plans, identifying stakeholders and champions through the demonstration activities.	Additional resourcing will need to be sought out by motivated stakeholders to implement the plans. This is beyond the scope of the project, but the UNEP and	Output 2.1

how?				
How will the results at the national level? Who will keep the legal and institutional framework up to date, and enforce it?	National policy and legal framework, and future needs assessment	Based on the stocktaking as well as the piloting experience, relevant amendments to the national policy and legal framework will be prepared and submitted for endorsement to the relevant governmental entities. The relevant Ministries will be responsible for enforcing the portions of policy in their department, working jointly with the UNCCD focal point in a networking or "hub" role. A needs assessment report addressing the national institutional framework (including coordination) will be prepared and circulated to the relevant Ministries (inc. MoENRP, MoA, MoRDI, MoESD) for their further consideration.	Additional resourcing would be required to address the recommendations of the needs assessment. Core funds from government are needed to implement the relevant portions of the policy and legal framework. The relationship to the relevant Ministries in developing the conclusions of the recommendations and the needs assessment are therefore critical to ensuring their eventual adoption.	Outputs 1.1 and 1.2
How will the remaining 65 municipalities replicate the project experience?	Up-scaling strategy	The PMU will develop an up-scaling strategy for the project, to be reviewed and approved by the steering committee. REC Caucausus will be available to support other municipalities in developing and seeking resourcing for L-SLM proposals.	As above, considerable investment by the project will be required at inception stage in developing an adequate "exit strategy" that ensures investments are sustained beyond the project lifespan.	Within Component 4 (project management), covered by co- financing

The following graphic provides an illustration of the project theory of change:

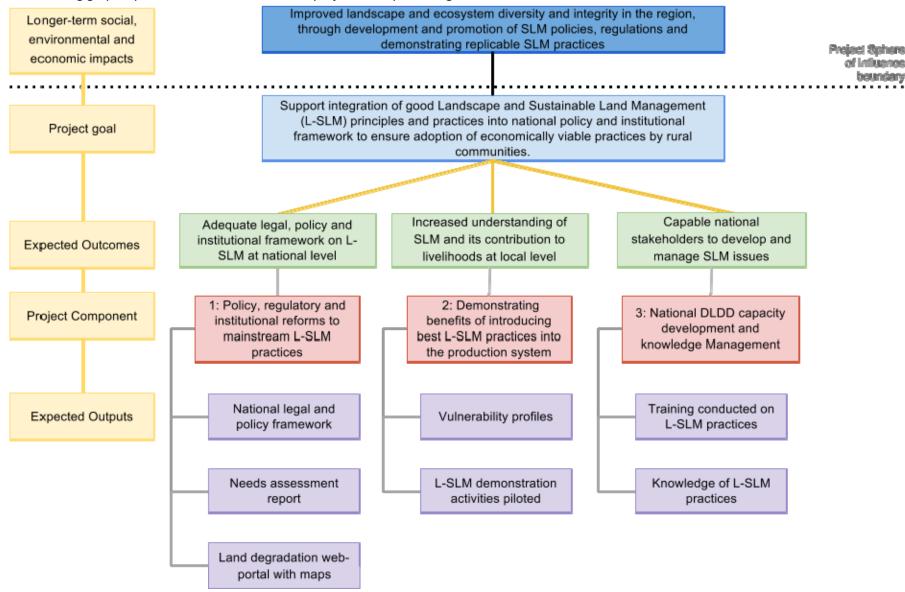


Figure 1: Project Theory of Change

Detail on the pilot project areas is provided in Annex 0. As above, the detailed demonstrations that the project will engage in for each site based on the results of vulnerability analyses carried out in the early phase of the project.

Sustainability considerations motivated the project design. The project sustainability will be assured through the presence and motivation of REC Caucasus and the momentum of the partnerships built through the municipal demonstrations. RECC is expert encouraging cooperation among government departments, non-governmental organisations, business, academic institutions, media and other stakeholders, supporting free exchange of information, offering advice and funding, and promoting public participation in environmental decision-making. The project will make a concerted effort to build coalitions, working through the trained cadre of 100 L-SLM champions at various levels. Efforts will be particularly made at the national level to ensure continued coordination to implement relevant provisions in the legal and policy framework. The UNCCD focal point for Georgia will be engaged as a networking and oversight hub, ensuring that partners are brought together on L-SLM.

Community management plans will be developed to guide future investments and provide a platform for further collaboration at municipal level. Certain capacity – and resources - will evidently be needed to sustain the results in the long run. The project will develop, during the inception phase, a sound exit strategy that addresses larger sustainability issues. It will be updated through a needs assessment completed in the later part of the project, and reflected in the Terminal Report. Given the newness of the L-SLM concept, the project undertaking will be a major learning curve for Georgia, and close attention will be paid for how the lessons can be disseminated and absorbed by partners (via the knowledge management output).

A. 5. <u>Incremental</u> /<u>Additional cost reasoning</u>: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated <u>global environmental benefits</u> (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project

Without GEF: Baseline activity (business as usual) is described in Section A.4, and the gaps identified include:

- Lack of encouraging examples of L-SLM in Georgia
- Lack of adequate legal and policy framework for L-SLM
- Limited awareness of L-SLM
- Limited capacity to respond to LD threat

The analysis of baseline scenario shows, that Georgian government has taken several positive steps towards addressing SLM and related climate change challenges – notably the adoption of the 2014 NAP. However, the current national SLM baseline is largely sectional and un-coordinated and enjoys limited technical backstopping. There has been increasing interest in integrated landscape approaches emanating from an expanding group of public, private, and civil society actors in Georgia. However, the scale and impact of such activities remains small relative to the scale of single-objective rural land management approaches. Furthermore, the recent increase in interest and adoption of L-SLM approaches has not been matched by a commensurate infrastructure of systematic reflection, evaluation, and research; knowledge sharing among different communities of practice; and strategic planning and priority setting for future programs and investments. In addition, the dearth of cross-sectoral collaboration and efforts to explicate, develop, and build capacity for L-SLM approaches for traditional sectoral actors (e.g., government ministries, private sector, various donors) has also hampered the mainstreaming L-SLM activities, many of which remain at the experimental or pilot level.

Without this project, it is less likely that will be made progress toward improving the understanding and broader adoption of effective L-SLM. In addition, lessons will need to be re-learned through trial-and-error, less evidence will be available to support the design of effective investments, and cross-sectoral and cross-disciplinary collaboration around integrated landscape approaches will be sparser. As a result, public, civil society, private and donor investments

may be poorly targeted, opportunities missed, and time lost in the effort to develop sustainable, climate-adapted rural landscapes. In the meantime, single-objective strategies are likely to continue to be pursued, resulting in large land areas devoted to uses that provide some specific benefits to rural population but, overall, provide sub-optimal bundles of food production, ecosystem conservation, livelihood, and economic development benefits. Multiplied across entire regions and the globe as a whole, continued use of such single-objective approaches will result in a failure simultaneously to achieve societal mandates related to increasing food production for a growing population, reducing poverty, maintaining key ecosystem services, preventing species extinction, and avoiding catastrophic climate change effects. To the extent that such sectoral development strategies do not yield the goods, services, and public benefits from rural landscapes on a sustained basis that stakeholders expect, the current increase in development assistance for agriculture is likely to be called into question.

Apart from government efforts, the international community and CSOs are making considerable investments in the fight against land degradation. There are several on-going project directed at community mobilization. These initiatives try to raise community awareness of natural resources management issues. Much of the effort directed toward SLM is being implemented with communities playing passive role and without meaningful government-CSO collaboration.

The GEF Alternative includes the incremental costs incurred in delivering: (i) Strengthened the legal and policy framework; (ii) Increased understanding of L-SLM at local levels; and (iii) Increased capacity to deal with the threats. With the GEF investment, the project will provide incremental benefits by supporting and empowering leaders from all levels to mainstream L-SLM as a viable strategy for integrating agriculture, ecosystem conservation (including biodiversity) and human wellbeing. To provide these benefits the initiative will develop a package composed of technical solutions, human and organizational capacity, and political will, and will feed these key inputs into environmental and agriculture management and governance initiatives at all levels. As presented in the activity descriptions above, the project will do so through the development of knowledge tools and resources; capacity building; technical innovation and development to support the implementation of L-SLM at the field and policy levels.

The project will support the generation of several benefits related to the Land Degradation Focal Area. Improved management and an enhanced enabling environment (in agriculture sector) will be facilitated through synthetic analysis of alternative approaches and experiences related to integrated landscape management (and the role of governance structures and policies in this management).

The project will also increase the capacity of country to fulfill obligations under the UNCCD (LD Outcome 4.1)—and increase the capacity of various actors including GEF grantees to support them in doing so—by fostering cross-project and cross-nation learning; assembling and sharing state-of-the-art tools, methods, and processes (e.g., tools for national-level impact monitoring); and providing broad outreach to diverse audiences regarding the benefits of L-SLM for addressing land degradation and desertification.

The project will leverage nearly \$4 million in co-financing (a 4:1 co-financing ratio). Most of this co-financing would not be available without GEF investment. GEF funding will allow the Implementing Agency, Executing Agency and partners to enhance the initiative in several critical respects: 1) provide funding for designing and commissioning components of the **Global Knowledge Base and Global Resource Portfolio** of greatest relevance and value for landscape- and national-level leaders, policy-makers, and program managers; 2) support key aspects to build strong action agendas, and strategies for field- and policy-level implementation for mainstreaming L-SLM; 3) support the participation of partners including community and indigenous leaders, and other activities; 4) support capacity building and leadership training to develop a quorum of L-SLM leaders in the country and additional well-positioned leaders in key local and international organizations, national governments, donor agencies, and elsewhere; and 5) support dissemination of the Global Resource Portfolio to leverage action and advocacy through the activities, networks, and partnerships of initiative team members on a landscape and country level. 5) Ellaboration of Public awareness,

communication and mainstreaming strategy, including support dissemination of the Global Resource Portfolio to leverage action

The project's strategy for public awareness, communication and mainstreaming will be ensured by REC Caucasus. The project will use the REC Caucasus website (www.rec-caucasus.org) for the publication of information on its objectives, outputs, activities, results, publications, news and newsletters. In addition, REC Caucasus network - electronic news system (for more than 3000 subscribers) will be used for publication, news and newsletters dissemination in order to ensure timely distribution of relevant information.

Moreover, coordinate development and ensure revision of production of printed and electronic products, communication products (press kits, releases, abstracts, etc.) and ensure their maintenance in accordance with EU regulations and guidelines, as well as project's specific requirements. Also ensures the data flow on the project activities to the stakeholder agencies and relevant projects.

The project will raise awareness and promote mainstreaming through organizing workshops and conferences which will include the L-SLM. Wherever possible, the team will take advantage of workshops and conferences organized by other agencies and institutions, in order to be cost effective and support integration with other initiatives, but as necessary it will also organize its own dissemination events at strategic moments during the project's implementation period.

Mainstreaming will also be promoted by working directly with Municipalities. In the pilot regions, the project will work in close cooperation with designated national institutions supported by well-established local NGOs/CSOs: this relation will result in the approaches being promoted by the project being firmly mainstreamed into these organizations in the long term. The Project Team will also play an important role in mainstreaming: in addition to ensuring that project activities respond to national needs they will provide interactive meetings for feeding project messages and results directly to the national institutions that participate in them.

Outreach regarding community-based approaches to land management will in addition be promoted through direct training of the staff of the municipalities.

In addition GEF funding provides the possibility to elaborate a road map for harmonization with the European Union (EU) Directives on land directives and its standards. The EU Framework Directives and Regulations (EC) 689/2008 includes in it the obligations and requirements deriving from associated agreements between Georgia and EU, and their reflection in national legislation will also be identified. EU directives treaty provisions, regulations, directives, recommendations and provisions directly regarding soil protection, in particular the Directive 2004/35/CE of the European Parliament and of the Council of 21st April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, contains a legal definition of "land damage" as a type of environmental damage: land damage is any land contamination that creates a significant risk of human health being adversely affected as a result of the direct or indirect introduction, in, on or below land, of substances, preparations, organisms or microorganisms.

The Sixth Environment Action Programme of the European Community expects:

- "a thematic strategy on soil protection, addressing the prevention of, inter alia, pollution, erosion, desertification, land degradation, land-take and hydro geological risks, taking into account regional diversity, including specificities of mountain and arid areas" (Article 6, Objectives and priority areas for action on nature and biodiversity).
- "a strategic integrated approach, incorporating new ways of working with the market, involving citizens, enterprises and other stakeholders is needed ... this approach should encourage sustainable use and management of land and sea" (Decision 1600/2002/EC of the European Parliament and of the Council of 22nd July 2002).

In more detail, the GEF alternative will deliver per component the following increment:

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Component	Baseline (B)	Alternative (A)	Increment (A-B)
1: Policy, regulatory and institutional reforms to mainstream L-SLM practices	The business-as-usual scenario involves (i) limited information on the extent of LD available to Georgia's policy and decision-makers, and (ii) a lack of legal and policy tools to support L-SLM. Although adoption of international agreements around DLDD and related issues, and general national environmental legislation is promising and sets the stage for Georgia-specific efforts to combat DLDD (via L-SLM).	The GEF alternative enables basic information on land degradation (via web portal) to inform priorities and interventions. Furthermore, the national legal framework related to L-SLM to be reviewed and recommendations for harmonizing existing L-SLM framework developed. Based on the stocktaking as well as the piloting experience, relevant amendments to the national policy and legal framework will be prepared and submitted for endorsement to the relevant governmental entities. The relevant Ministries will be responsible for enforcing the portions of policy in their department, working jointly with the UNCCD focal point in a networking or "hub" role. A needs assessment report addressing the national institutional framework (including coordination) will be prepared and circulated to the relevant Ministries (inc. MoENRP, MoA, MoRDI, MoESD) for their further consideration.	Enhanced cross-sector legal, policy and enabling environment for L-SLM.
2: Demonstrating benefits of introducing best L-SLM practices into the production system	The business-as-usual scenarios maintains a lack of Georgian examples of sustainable production and methods of resource use. There would be no inspiration of how sustainable management practices for L-SLM would work in the Georgian context. No frameworks available to target or continue such demonstrations.	The GEF alternative allows Georgia to target L-SLM interventions based on needs, via the vulnerability profiles. It will enable Georgia to demonstrate sustainable production and management practices locally, in 3 municipalities and showcase these to an additional 64 municipalities.	Sustainable management practices demonstrated and adopted by relevant local communities in priority regions in Georgia. Frameworks to carry on such interventions beyond the project lifespan. Demonstrations providing inspiration to 64 additional municipalities within Georgia.
3: National DLDD capacity development and knowledge management	The business-as-usual is a lack of trained L-SLM champions in Georgia and no knowledge management efforts or platform, beyond basic servicing of UNCCD obligations.	The GEF alternative empowers Georgia to combat DLDD via a trained cadre of 100 L-SLM Champions, working at different levels from municipal and community to national. The project will develop a plan and mechanism for knowledge sharing at national	

	a	and sub-national level,	and design of future
	e	emphasising the communication of	responses.
	r	results from the demonstration	
	s	sites and promoting L-SLM	
	iı	nnovation.	

Global environmental benefits

Georgia sits at terrestrial crossroads between the Middle East, Europe and Asia. It is has notably valuable fresh water resources, with 2,600 rivers and up to 260 lakes. Forests cover around 40% of Georgia's territory and provide carbon storage as well as habitat for a significant number of fauna and flora species of Georgia. The country belongs to one of 35 globally significant "biodiversity hotspots" identified by Conservation International²⁰; it is on the list of 200 global terrestrial eco-regions characterised by WWF. The global importance of the eco-region, the necessity of its protection and conservation is internationally recognized, in part because of the area's exceptional number of endemic species and the high degree of threat to those species²¹. Its high degree of landscape diversity means Georgia's habitats are home to a wide range of species, including 380 endemics and 44 species in IUCN Red List's 'endangered' and critically endangered' categories. These include globally significant populations of mammals including remarkable species of Caucasian ibex: Capra cylindricornis and Capra caucasuca, belonging to Caucasian endemic species. There are also 300 species of vascular plant endemic to the country and 600 more species that are endemic to the Caucasus region. Georgia's flora also includes a number of 21% of high endemic genera; 16 genera are considered endemic or subendemic to the country. Georgia is one of the centres of the origin for diversity of cultural plants. Various remarkable species of vine, grains, and fruits were formatted here. Currently Georgia's biodiversity and carbon sequestration potential is threatened by as loss of habitats, fragmentation and degradation.

The project will improve L-SLM practices in Georgia resulting in global environment benefits these will deliver including:

- Improved provision of agro-ecosystem and forest ecosystem goods and services;
- Reduced vulnerability of agro-ecosystem and forest ecosystems to climate change and other human-induced impacts;
- Reduced GHG emissions from agriculture, deforestation and forest degradation;
- Increased carbon sequestration / improved carbon stocks; and
- Improved status of biodiversity by safeguarding ecosystems, species and genetic diversity, including through habitat protection.

The global environment benefits expected from the project will be derived from **improved landscape and ecosystem diversity and integrity in the region, through development and promotion of SLM policies, regulations and demonstrating replicable SLM practices**. This will involve integrated, effective management of soil, water, floral and faunal biodiversity for physical and socio-economic development, paying particular attention to environmental stabilization. The project will develop capacity for L-SLM through knowledge tools and resources; and technical innovation to support the implementation of L-SLM on the field and at policy level.

²⁰ CI. 2014. Caucasus Hotspot. [Link]

²¹ UNEP 2013. TEEB Scoping Study for Georgia. Main findings and way-forward. [Link]

The project will therefore support the generation of several benefits related to the GEF's Land Degradation Focal Area. Improved management and an enhanced enabling environment (in agriculture sector) will be facilitated through synthetic analysis of alternative approaches and experiences related to integrated landscape management (and the role of governance structures and policies in this management).

The project has a special focus on social and economic benefits, mainly opens up access for young people and vulnerable groups especially women, to the labor market. It establishes mechanisms that assist communities and local administrations in planning and supervising targeted activities to encourage self and local development initiatives through local land use planning. The project will develop and communicate the evidence base on the role that L-SLM can play in improving rural livelihoods through sustainable practices that increase agriculture production, reduce desertification and vulnerability to climate change and other shocks, and increase resilience of natural resource-based economies.

Based on this evidence base, the project will develop and promote specific agendas to support the adoption of L-SLM within a wide range of agriculture and poverty alleviation programs and investments in places where they are likely to be particularly effective. By supporting improved land management and enabling environment to address land degradation, the project will support socioeconomic benefits particularly for poor, natural resource dependent populations (especially women) and rural communities subjected to vulnerabilities exacerbated by climate change. Several products of the project focus explicitly on landscape design, management and governance strategies to ensure that needs of poor groups within the landscape are addressed, and action planning processes that include representatives of low-income and marginalized groups in negotiations.

Given that agriculture is conducted predominantly by women — and that women are often more vulnerable than men to effects of land degradation — the project focus stands to benefit women substantially, if not disproportionately. The project relies upon diverse institutions to continue support for improving cooperative and harmonized approaches towards L-SLM. The project also relies upon local stakeholders to embrace, support and adopt integration of SLM principles and practices into local plans

A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

In the addition to the risks identified at PIF stage, the table below indicates additional higher levels risks and mitigation measures. Other operational risk identified in Annex R.

Identified Risks and Category	Impact	Likeli- hood	Risk Assessmen t	Mitigation Measures
Political risk Political resistance to adjust 'governance frameworks' (i.e. policies, plans, strategies, programmes etc.)	HIGH	LOW	LOW	• Stakeholders, in particular decision-makers, the media and advocacy groups will be sensitized by the project. One of the project's first activities will be establishment of the steering committee to provide political oversight for the project, and to provide general advice for project implementation, ensuring the project's consistency with the other ongoing development processes in the countries.

				 All documents (assessments, recommendations, amendment to the legislation, etc) will be discussed and validated via stakeholders workshops. Policy matters are expected to be discussed and land degradation information to be widely shared. All of these are measures to counteract political resistance, and the issue will be monitored through the project lifespan.
Strategic risk Capacity of local communities could be much lower than needed for successful implementation of local land use plans and piloting L-SLM practice	MEDIU M	MEDIU M	MEDIUM	• The project will enter into strategic partnerships at the local level, not just with local government, which has already spelt out its support to the project on consultation meetings, but in particular with local NGOs and community based organisations. Understanding the local reality and having the project intervention being facilitated by organisations already on the ground will be crucial to overcome cultural barriers. The project's communication and outreach strategy will take this into account. The communication products will be locally-adapted. The project will develop education modules and training packages, as well as knowledge materials on best available practices for the local authorities and CBOs as well.
Extreme weather conditions (droughts, hail) may reduce effectiveness of the pilot projects and may divert attention on project execution	MEDIU M	LOW	MEDIUM	Local climate conditions are a key constant in management approaches, and will be integrated into the planning of pilot projects focusing on windbreaks and re-cultivation of fertile soils. The impacts of extreme weather condition will be assessed and relevant mitigating activities considered in the pilot sub-projects.
Unpredicted disaster occurrence that may divert attention on project execution				
Project successes are not maintained after the project, and are not replicated to other sites.	LOW	MEDIU M	MEDIUM	 Activities were designed responding to specific demand The project strategy focuses on (i) developing realistic activities and recommendations based on grass-roots experience; (ii) working with the existing developing programmes; and (iii) ensuring there are economic benefits from innovative framing practices. Together, these

		elements should ensure the sustainability and
		replicability of the project successes

To address these challenges and risks, the implementing agency will work closely with partners to develop the initiative program, engage professional facilitation and support functions, and develop communication and outreach plans. Planning processes have been designed and professional facilitators and advisors will be engaged to manage these risks. Another risk is that partners will fail to make anticipated resources available for planned follow-up collaborative work. However, this risk is substantially mitigated by the advance written commitments of project partners to carry out the landscape- and country-level activities that will heavily leverage GEF support to generate the anticipated project outcomes.

A.7. Coordination with other relevant GEF financed initiatives.

The project will build and complement the ongoing GEF-funded projects executed in Georgia. During the PPG phase a comprehensive assessment of impacts and lessons learned from GEF activities in Georgia was conducted to capture the experiences and lessons learned. There have been several projects in Georgia supported by the GEF, namely:

- Guidance and lessons have been drawn from the project "enabling Activities for the Preparation of Georgia's Third National Communication to the UNFCCC" for the period 2011-2014 is financed by GEF. The Third National Communication of Georgia (TNC) is the continuation of the work conducted under the Second National Communication. The TNC will update and strengthen information provided regarding national circumstances, greenhouse gas inventories, climate change mitigation, vulnerability to climate change and steps taken to adapt to climate change, and information on public awareness, education, training, systematic research and observation. The project will also increase the capacity to produce subsequent NCs that meet CoP guidelines and improve climate change policies in Georgia. Outcomes of this project are detailed in the relevant TNC sections on: GHG Inventory; Vulnerability and Adaptation Assessments; mitigation Analysis; national circumstances, Constrains & gaps, related financial, technical, & capacity needs; Other relevant information. The target areas of this project are: Adjara, Kakheti, Zemo-Svaneti.
- The findings and studies of the GEF-financed project "The alignment to the UNCCD strategy of the NAP of Georgia to combat desertification" will be used in implementation of this project, as described in this document particularly section X. Activities recommended by and gaps identified during the NAP alignment will be fulfilled by implementation of this L- SLM project.
- Lessons have been drawn from the Clima East Pilot Project: "Sustainable management of pastures in Georgia to demonstrate climate change mitigation and adaptation benefits and dividends for local communities", the objective of which is to rehabilitate 8,700 ha of degraded pastures (including pastures in Vashlovani Protected Areas and adjacent alternative pastures) and introduce/implement sustainable pasture management practices in the area among the farmers/sheep-breeders in the Dedoplistskaro region. This is to be achieved through activities conducted in pastures at different levels of degradation within and surrounding the Vashlovani PAs, which include: a) rehabilitation of pastures, b) introduction of sustainable land management practices, c) improved sustainable livelihood of farmers. The Project will coordinate with, and exchange experiences with the Clima East Pilot Project in introduction of sustainable land use practice.

• The project will seek out cooperation with the Global Forest Watch (GFW) 2.0 project22, particularly on the Atlas of Desertification and knowledge sharing initiatives of the project. Via the Ministry of Environment and Natural Resource Protection (MENRP), Georgia is one of the project's 2 pilot countries. Via GFW, Georgia will gain nationally validated data sets, including refined forest cover / change data and additional locally generated data layers. These may be valuable additions to or overlays for the e-Atlas of desertification

Other initiatives are ongoing with relevance to agriculture, forestry or protected areas notably:

- The European Union (EU) funded "European Neighborhood and Partnership Instrument (ENPI) East Countries Forest Law Enforcement and Governance (FLEG) II Program" (2013-2016) is aimed to support the participating countries strengthen forest governance through enhancing their forest policy, legislation and institutional arrangements, and implementing sustainable forest management models on a pilot basis²³;
- The project "Sustainable biodiversity management in the South Caucasus (component of the environmental protection programme)", German Federal Ministry for Economic Cooperation and Development (BMZ), Armenia, Azerbaijan, Georgia, uses successful examples of the sustainable use of natural resources to boost economic development in rural areas and attract further investment, since conservation areas are no longer considered the only way to preserve species diversity. The main focus of cooperation for the project is creating a framework for sustainable biodiversity management. The project helps elaborate strategies and tools to improve environmental decision-making. It focuses on developing the managerial and technical expertise of governments in the South Caucasus. At local level, the project focuses on the management of natural resources at a number of pilot sites. Here, it improves agricultural and forestry production systems, in order to help combat climate change and preserve biodiversity. The marked differences between the three countries of the South Caucasus call for a differentiated approach. The activities are implemented in a country-specific and needs-oriented manner. The project also promotes regional political dialogue and the exchange of views ad information on technical issues. Financial support is provided by Austria. A national biodiversity monitoring system (NBMS) for the region has been developed and introduced in Georgia. In the neighboring countries of Armenia and Azerbaijan, national biodiversity monitoring and control systems provide data to help formulate and design sustainable resource management policies.
- The project "Transboundary Joint Secretariat for the Southern Caucasus Phase 3 (TJS III), Project funded by BMZ aims to further develop the Eco-regional Conservation Plan and promote its implementation in Armenia, Azerbaijan and Georgia (target objective). It will contribute to the conservation of biodiversity in Armenia, Azerbaijan and Georgia, without impairing living standards of local population in the long-term (main objective). Reducing conflicts and crisis prevention shall be achieved through contributions of TJS through supporting regional sector communication channels (secondary objective).
- The regional project, funded by the government of Norway "Mainstreaming of biodiversity values into decision making at various levels of governance in South Caucasus "is aimed to mainstream biodiversity values into decision-making and to encourage a regional approach at various levels of biodiversity governance in the South Caucasus countries ".RECC team will build synergies . "Mainstreaming project" activities that do not overlap, but have synergy potentials, include the capacity development for NBSAP and NAP planning implementation and monitoring and creating a regional platform to discuss the NBSAPs and NAPs of all three South Caucasus Countries.

B. Additional information not addressed at PIF stage

²² Project detail on GEF website [Link] and project website [Link].

²³ Details from WWF [Link].

B.1 Describe how the stakeholders will be engaged in project implementation.

A stakeholder analysis was conducted during the Project Preparation phase. Representatives of all stakeholder groups were invited to the validation workshop held in Tbilisi on 19th December 2014. Minutes of the final validation workshop, Annex K.

Stakeholders' effective engagement during project implementation will be assured through the identification of, and support for, activities which simultaneously improve the livelihoods of local communities and builds local support for effective implementation of project tasks. Careful identification and engagement of community members affected by land degradation/desertification is key to success of the project, and to the successful long-term application of SLM practices in pilot municipalities. The Project will provide resources to allow regular consultation with local communites and their involvement in the project activities. The role of Government agencies has also been carefully analysed (see Table 2).

Table 2: Role of key stakeholders in the project

Key stakeholders	Mandate and institutional responsibility	Anticipated role in the project
Ministry of Environment and Natural Resources Protection (MoENRP) Land Resources Protection and Mineral Resources Service established under the MoENRP. National Environmental Agency (NEA)	 Focal Point for UNCCD. Consequently MoENRP is responsible for defining and elaborating the main direction and policy on environmental protection and the sustainable use of natural resources. It will play crucial role in revising the legal framework and in development of the amendments to the legal acts, as well as in the development of the National Integrated Landscape Management Strategy paper Land Resources Protection and Mineral Resources Service is responsible: To take part in development and implementation of State policy on sustainable management and targeted use of land resources and mineral resources; To plan actions to mitigate desertification, land degradation processes and coordinate their implementation; To develop the database of land polluted by hazardous substances and waste; To create the assessment system of land degradation and pollution; to participate in the development of annual and state programmes based on monitoring and relevant research of soil fertility in the frames of its competence. 	A representative of the MoENRP will lead the Project Steering Committee. Representatives of the Land Resources Protection and Mineral Resources Service and National Environmental Agency will be involved in training sessions on SLM practices and on impact indicators of good SLM practices as key responsible units under the MoENRP on land degradation/desertification issues. All documents prepared within the project will discussed with representatives of the abovementioned units and finally validated on workshops with participation of decision-makers. NEA will take part: To develop the preventive activities against the natural and anthropogenic disasters, inter alia, desertification and land degradation mitigation. To monitor soil erosion/degradation and

		fertility in the frames of its competence
Ministry of Agriculture (MoA)	 MoA is responsible for: Coordination and monitoring of activities for the evaluation of soil productivity; Creation of a joint bank for the consolidation of land and the evaluation of the quality of soil; Organization of a rational use of land; Implementing arrangements against soil erosion. 	Through its proposed involvement in the steering committee, MoA will help to identify and plan coherent pilot projects on SLM practices activities.
Ministry of Economy and Sustainable Development (MoESD)	MoESD is responsible for the privatization process of state lands, including pasturelands.	Involvement of the MoESD in the development of SLM legal framework and in elaboration of recommendations for improvement of SLM institutional framework will be essential.
Research organisations and academia including the Agrarian University, Institute of Geography and other research institutions	Undertake research activities. These intitutions are also owners of important data on land degradation.	Can help to identify land-related priorities and solutions, agronomic best practices and promising new business opportunities. Academic consideration of land degradation and desertification in Georgia by Georgian academics is in some respects nascent ²⁴ and should be supported by the project through close collaborations. These institutions are essential for the development of maps for the Land Degradation web-portal.
Local NGOs and CSOs e.g. Green Alternative	Establishing support for any relevant legal, policy, institutional framework and/or other initiatives on L-SLM at various levels; Increasing understanding of L-SLM	Will help to identify gaps and chalanges relaited to aplication of the SLM; Can contribute in the process of identification of the most efficient mechanizms relaited to the public participation in the decision amikng relaited to the SLM
Administrations of the local municipalities (especially Gradabani, Dedoplistskaro and Akhmeta	 Organization of a rational use of land; Implementing arrangements against soil erosion. 	Will be key actors in development of the local land use plans based on vumnerability assessment. These municipalities will be represented in the project steering committee and will be actively involved in development

²⁴ See e.g. Basialashvili et al 2015. Desertificatication risk in Kakheti Region, East Georgia. *Journal of Environmental Biology* Vol 36: 33-26.

municipalities)	of pilot projects. Agricultural Services under
including the	Municipalities administration will be
Information-	engaged to participate in the training
Consultation Centers	sessions on L-SLM practices. Knowledge
established in the	products and public awareness materials to
municipalities	be developed within the project will be
	targeted at the needs of the local authorities
	to ensure further application of the SLM
	approaches in the municipal development
	plans.

During the project inception phase, a stakeholder involvement plan will be approved by the steering committee and updated as necessary. Engagement will be sustained through various institutional structures: the project steering Committee, local Consultation Platforms and through regular public-private sector forums with innovative farmers and community leaders. The proposed landscape level Monitoring and Evaluation (M&E) mechanism will also bring stakeholders together on an annual basis to share perspectives and mutually evaluate the effectiveness of project interventions on the basis of mutually agreed set of social, economic and environmental criteria. As indicated in the table above, farming is the primary economic activity and therefore farmers will play a central role in the implementation of the pilot projects. The farmers will be therefore engaged through direct contact and through their regular participation in the workshops and training planned within the project.

B.2 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

The majority of poor people in Georgia live and work in rural areas (see data in the tracking tool, and detailed notes in Annex P). Most rural women work in agriculture, but without resources (e.g. to purchase fertilizer, better seeds and other inputs), their yields tend to be low. Worsening poverty has also taken its toll on men, as their inability to fulfil their traditional role as food providers has led to an increased incidence of alcoholism and related heart disease. IFAD notes about 20% of the Georgian population has migrated in search of work over the last decade, leaving just 100 men to every 124 women, and the rate of male depopulation is increasing²⁵.

Pilot projects focused on agroforestry (windbreak management), pasturelands management and soil protection, with real social impacts will ensure participation of more community members in agricultural markets, thus increasing household incomes. This will contribute to securing livelihoods and food security in the short term as well as increasing prosperity for the rural poor in the long-term. Revitalizing local institutions for range and resources management and governance will also increase social capital and enable empowerment of rural people.

Women play a critical role in agricultural activities in both municipalities. The number of female headed households is substantial (36.4%) and when compared to male-headed households, face greater risk of falling into extreme poverty²⁶. In recognition of this fact, a gender analysis will underpin development and implementation of the pilot projects. Thus, a number of project activities are expected to directly and indirectly contribute towards improving the condition of

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²⁵ IFAD. Georgia gender profile [Link].

²⁶ Georgia Department of Statistics. 2008. Women and Men in Georgia, p.30.

women. This includes through enhancing their capacity to participate in decision-making processes, and engaging in land use activities that have the potential to improve their economic situation. Women will benefit particularly from skill development (education/training). Access to modern technologies and knowledge on land management will also contribute increasing both the incomes and social capital of women.

National capacity for dealing with land degradation and addressing desertification will be enhanced, not just through the development and use of the system, but also through the training of national and local planners in the application of products from the system. At national level, the project will provide modern GIS-based tools for analyzing vulnerabilities to land degradation/desertification linked to land resources management.

In the short- to medium-term, this project supports national development goals and plans to achieve Millennium Development Goals (MDGs) ²⁷ on eradicating extreme poverty and hunger (#1), to promote gender equality and empower women (#3), and to ensure environmental sustainability (#7). The project will also link to the forthcoming Sustainable Development Goals and report on these in the Inception Report²⁸.

B.3 Explain how cost effectiveness is reflected in project design:

This project will Addresses both land degradation (LD) and landscape and sustainable land management (L-SLM) and is highly cost-effective as it will help at the same time to address the issue of land degradation and application of SLM leading to ecosystem restoration. The project cost effectiveness is also demonstrated, as it will generate multiple environmental and socioeconomic benefits. It is estimated that 33 % of the arable lands are eroded in Georgia. Therefore, if preventive actions are not taken, production losses from food crops, reforestation etc. will lead to considerable economic losses. The GEF investment will therefore not only help to achieve SLM but also to avoid economic losses, which will otherwise create various social negative consequences.

The project aims at development of country level policy, legal and regulatory frameworks that integrate SLM principles into decision-making process in Georgia. Project funds will be invested in improvement of integrated sectorial policies, creating the knowledge and management capacities and in working at local level to reduce disaster risk and planning of effective preventing measures. The project has a focus on integrated sustainable land management in environmental hotspots, with the mid- to long-term aim of reconverting degraded lands, with law productivity into its original uses, mostly agricultural. Alleviating and remedying soil erosion that is not confined to these hotspots but has further encroachment upon marginal lands is a cost-effective approach in itself, as it reduces drought and erosion risk and associated consequential costs of environmental disasters.

The project design builds on the efficient resources use approach by envisaging to conduct targeted capacity building and backstopping for g the Ministry of Natural Resources protection and Environment in Georgia to fulfill and successfully implement the commitments under the UNCCD, CBD And UBFCCC conventions. Capacity development measures within the project will enable Parties to benefit from support from experts and international consultants in a cost effective manner, result in coordinated actions at the national and international level and benefit from synergistic effects. The majority of project funds will be directed to establishing an enabling environment through technical support and assistance for national level activities. A more detailed focus on the more encompassing performance and progress indicators (such as those noted in the SLM context) will enable sound, rigorous and scientifically sound assessments at the national and regional levels on both the Convention implementation and areas of high national priorities, such as land degradation trends and the impact of mitigation measures, plus it will allow for long term planning for SLM as well as enhance synergy with the other Conventions (CBD, UNFCCC) at national level.

C: DESCRIBE THE BUDGETED M&E PLAN

²⁷ See MDG overview for Georgia online at UNDP Georgia [Link].

²⁸ UN. 2015. Sustainable development goals [Link].

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

A. RECORD OF ENDORSEMENT 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 OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Nino Tkhilava	GEF Operational Focal Point in Georgia Head of Department of Environmental Policy and International Relations	MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES PROTECTION	03/11/2014

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	DATE	Project Contact Person	Telephone	Email
Brennan Van	Brown Vonligh	January 14,	Adamou	+254207623	Adamou.Bouhari@un
Dyke,	, , , , , , , , , , , , , , , , , , ,	2016	Bouhari	860	<u>ep.org</u>
Director,			Task		
GEF			Manager		
Coordination			BD/LD		
Office UNEP			&RFP		
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ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Please see Annex A

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

GEF Secretariat comments	UNEP and Partners responses	Reference
05/06/2014 UA: Detailed information at output level is expected at CEO endorsement	Details information on output and related activities are now provided.	Annex I: Key deliverables and benchmark
including quantifiable targets and indicators	Quantifiable baseline and targets are now set for each outputs	Annex A: Project Logical Framework

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS²⁹

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

Project Preparation Activities Implemented	d GEF/LDCF/SCCF/NPIF Amount (\$)			
	Budgeted Amount	Amount Spent To date	Amount Committed	
Inception	8000	8000	(
Baseline analyses	10700	10700		
Legal and institutional analyses	8950	8950		
Validation	7500	7500		
Diagnostic analyses	10512	10512		
Total	45 662	45 662	(

If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities.