



Sustainable Management of Agricultural Biodiversity in Vulnerable Ecosystems and Rural Communities of Samtskhe-Javakheti Region in Georgia

Part I: Project Information

GEF ID

10829

Project Type

MSP

Type of Trust Fund

GET

CBIT/NGI

CBIT No

NGI No

Project Title

Sustainable Management of Agricultural Biodiversity in Vulnerable Ecosystems and Rural Communities of Samtskhe-Javakheti Region in Georgia

Countries

Georgia

Agency(ies)

UNEP

Other Executing Partner(s)

Ministry of Environmental Protection and Agriculture of Georgia (MEPA), through the Regional Environmental Centre for the Caucasus (REC Caucasus)

Executing Partner Type

Government

GEF Focal Area

Biodiversity

Taxonomy

Focal Areas, Biodiversity, Mainstreaming, Tourism, Agriculture and agrobiodiversity, Supplementary Protocol to the CBD, Access to Genetic Resources Benefit Sharing, Protected Areas and Landscapes, Productive Landscapes, Land Degradation, Land Degradation Neutrality, Land Productivity, Sustainable Land Management, Income Generating Activities, Sustainable Agriculture, Integrated and Cross-sectoral approach,

Improved Soil and Water Management Techniques, Sustainable Livelihoods, Food Security, Climate Change, Climate Change Adaptation, Livelihoods, Climate resilience, Community-based adaptation, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, Influencing models, Demonstrate innovative approaches, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Transform policy and regulatory environments, Deploy innovative financial instruments, Stakeholders, Private Sector, Individuals/Entrepreneurs, Type of Engagement, Consultation, Information Dissemination, Partnership, Participation, Local Communities, Beneficiaries, Communications, Public Campaigns, Education, Awareness Raising, Civil Society, Academia, Non-Governmental Organization, Community Based Organization, Gender Equality, Gender Mainstreaming, Women groups, Gender-sensitive indicators, Gender results areas, Capacity Development, Access and control over natural resources, Access to benefits and services, Knowledge Generation and Exchange, Participation and leadership, Integrated Programs, Food Systems, Land Use and Restoration, Sustainable Food Systems, Smallholder Farming, Commodity Supply Chains, Smallholder Farmers, Capacity, Knowledge and Research, Innovation, Knowledge Exchange, Targeted Research, Learning, Indicators to measure change, Adaptive management, Theory of change, Knowledge Generation

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 1

Climate Change Adaptation

Climate Change Adaptation 0

Duration

48 In Months

Agency Fee(\$)

168,765.00

Submission Date

10/6/2021

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-1-4	GET	1,776,485.00	11,600,000.00
Total Project Cost (\$)		1,776,485.00	11,600,000.00

B. Indicative Project description summary

Project Objective

To mainstream agro-biodiversity conservation into agriculture sector of Samtskhe-Javakheti Region of Georgia. .

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
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Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Improved national policy and legal frameworks to sustainably manage agricultural biodiversity and support livelihoods through adapted wild edible plants (local vine and wheat varieties) in agricultural production	Technical Assistance	<p>1.1. Adoption of new policies integrating sustainable management of agricultural biodiversity with the focus on adapted wild edible plants (vine and wheat varieties)</p> <p><i>[Indicator: At least two policy documents addressing sustainable use of agricultural biodiversity (local or national) will be issued where appropriate adopted]</i></p>	<p>1.1.1. National and local agricultural biodiversity policy documents developed that takes account of unique diversity, ecosystem function and mainstreaming of local agricultural biodiversity into agricultural and other sectoral policies, strategies and programs</p> <p>1.1.2. Regulatory framework in place to conserve and sustainable use of agricultural biodiversity and promote agrotourism</p> <p>1.1.3. Sustainable agricultural biodiversity conservation and utilization of local programs and biodiversity stewardship agreements for agriculture and tourism sectors are developed and implemented to support</p>	GET	290,000.00	1,660,000.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
2. Demonstration of diversified agricultural biodiversity-friendly practices and products through adapted wild edible plants (local vine and wheat varieties) - Has both TA and INV	Technical Assistance	<p>2.1. Increased area devoted to sustainably managed agricultural biodiversity through mainstreaming of diversified practices and products in Samtskhe-Javakheti Region enhancing resilience to climate change</p> <p><i>[Indicator: Area of landscapes under sustainable management in production systems to benefit biodiversity will be increased in total up to 20,000 ha of agricultural lands]</i></p> <p><i>[Indicator: At least 50% of farmers and local community representatives to participate in the capacity-development trainings are women]</i></p>	<p>2.1.1. Field-based surveys and mapping of the distribution of wild populations of the targeted crop (vine and wheat varieties) wild relatives (CWRs) in the wild and landraces at the farm level are conducted</p> <p>2.1.2. Two nurseries and field seed banks to manage and multiply seeds and seedlings of wild edible plants (vine and wheat varieties) established</p> <p>2.1.3. Participatory and sustainable management practices identified, planned and implemented on at least 6 pilot sites that will support traditional crop varieties of adapted wild edible plants to improve local diversity</p>	GET	1,024,987.00	7,223,600.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
3. Increased awareness of the importance of agricultural biodiversity, capacity building of the key stakeholders and knowledge management	Technical Assistance	<p>3.1. Stakeholders apply their increased capacity and knowledge and take actions on sustainable management of agricultural biodiversity</p> <p><i>[Indicator Increased score in the Capacity Development Scorecard / Baseline and targets will be established during the PPG phase]</i></p> <p><i>[Indicator: At least 50% of key stakeholders under the component 3 are women, including female farmers, producers and homemakers]</i></p> <p><i>[Indicator: Content of awareness-raising campaigns are oriented on breaking stereotypes on conventional gender roles and reinforcing women?]</i></p>	<p>3.1.1. National capacity developed to mainstream and promote agricultural biodiversity and agrotourism.</p> <p>3.1.2 In selected Samtskhe-Javakheti Region, a significant number of large and small scale private sector (tourism and agriculture) representatives capacitated to implement and monitor compliance with agro-biodiversity friendly products and services targeting both women and men.</p> <p>3.1.3. Gender-sensitive information and awareness raising campaigns conducted, fostering greater appreciation of agrotourism and agrobiodiversity as a resource for development and wellbeing at local and national levels.</p>	GET	250,000.00	1,500,000.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Monitoring Evaluation				GET	50,000.00	100,000.00
Sub Total (\$)					1,614,987.00	10,483,600.00
Project Management Cost (PMC)						
	GET		161,498.00		1,116,400.00	
Sub Total(\$)			161,498.00		1,116,400.00	
Total Project Cost(\$)			1,776,485.00		11,600,000.00	

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministry of Environmental Protection and Agriculture of Georgia (MEPA)	In-kind	Recurrent expenditures	1,250,000.00
Recipient Country Government	Akhaltzikhe Municipality	In-kind	Recurrent expenditures	750,000.00
Recipient Country Government	Aspindza Municipality	In-kind	Recurrent expenditures	750,000.00
Recipient Country Government	Borjomi Municipality	In-kind	Recurrent expenditures	750,000.00
Recipient Country Government	Akhalkalaki Municipality	In-kind	Recurrent expenditures	750,000.00
Recipient Country Government	Ninotsminda Municipality	In-kind	Recurrent expenditures	750,000.00
Recipient Country Government	Adigeni Municipality	In-kind	Recurrent expenditures	750,000.00
Donor Agency	German Development Agency for International Cooperation (GIZ)	Grant	Investment mobilized	850,000.00
Other	REC Caucasus	Grant	Investment mobilized	1,200,000.00
Other	REC Caucasus	In-kind	Recurrent expenditures	3,800,000.00
Total Project Cost(\$)				11,600,000.00

Describe how any "Investment Mobilized" was identified

Ministry of Environmental Protection and Agriculture of Georgia (MEPA) will support project activities with a total of US\$ 1,250,000 co-financing. Recurrent expenditures from MEPA will be covered by the state budget allocations during the project life-cycle through annual state budget lines for operational and programing costs related to biodiversity protection, viticulture development and agricultural research and extension. Akhaltsikhe, Aspindza, Borjomi, Akhalkalaki, Ninotsminda and Adigeni municipalities will allocate US\$ 750,000 each during the project life-cycle through annual municipal state budget allocations for support of local agricultural development. GIZ (South Caucasus Office) will provide US\$ 850,000 investments on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMU) and other German public sector clients operating in Georgia in the following priority areas: Sustainable economic development; Democracy, civil society and public administration; and Environmental policy, conservation and sustainable use of natural resources. In addition, the executing agency, REC Caucasus, will support project activities with a total of grant US\$ 1,200,000 and in-kind US\$ 3,800,000 investments through its projects and programs related to biodiversity, agriculture and rural development.

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Georgia	Biodiversity	BD STAR Allocation	1,776,485	168,765	1,945,250.00
Total GEF Resources(\$)					1,776,485.00	168,765.00	1,945,250.00

E. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount (\$)

50,000

PPG Agency Fee (\$)

4,750

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Georgia	Biodiversity	BD STAR Allocation	50,000	4,750	54,750.00
Total Project Costs(\$)					50,000.00	4,750.00	54,750.00

Core Indicators

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
20000.00	0.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
20,000.00			

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)	613041	0	0	0
Expected metric tons of CO ₂ e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)	613,041			
Expected metric tons of CO ₂ e (indirect)				
Anticipated start year of accounting	2023			
Duration of accounting	20			

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)				
Expected metric tons of CO ₂ e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	28,600			
Male	26,400			
Total	55000	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

The Project will contribute to Aichi Biodiversity Target 13, which aims to develop and implement strategies to minimize genetic erosion and safeguard genetic diversity. Consequently, this would contribute to accomplishing other Aichi Biodiversity Targets including sustainable production and consumption (Target 4), sustainably managed agriculture (including aquaculture and forestry) (Target 7) and fully integrated and respected traditional knowledge, innovations, practices, and customary use of biological resources (Target 18).

Part II. Project Justification

1a. Project Description

1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed

Conservation and sustainable use of biodiversity contributes significantly to agriculture. The Earth's biodiversity is being lost at an alarming rate, putting in jeopardy the sustainability of agriculture and ecosystem services and their ability to adapt to changing conditions, threatening food and livelihoods security¹[1]. The major challenge for agriculture is to ensure food security, adequate nutrition and stable livelihoods for all, now and in the future, by increasing food production while adopting sustainable and efficient agriculture, sustainable consumption of resources, and landscape-level planning to ensure the preservation of biodiversity.

A rapidly growing global human population, and therefore a rapidly growing world demand for food, coupled with changing production and consumption patterns have stimulated the evolution of agriculture from traditional to modern, intensive systems. However, while modern agriculture has enabled food production to increase, contributing much to improving food security and reducing poverty, it has also been responsible for considerable damage to biodiversity, primarily through land-use conversion which is expected to remain the largest driver of biodiversity loss beyond 2010 and at least to 2050²[2], but also through overexploitation, intensification of agricultural production systems, excessive chemical and water use, nutrient loading, pollution and introduction of alien species.

Many key components of biodiversity for food and agriculture at genetic, species and ecosystem levels are in decline. Evidence suggests that some crops and, in some areas, plant diversity in farmers' fields is decreasing and threats to diversity are increasing. Many species that contribute to vital ecosystem services, including pollinators, natural enemies of pests, soil organisms and wild food species, are in decline as a consequence of the destruction and degradation of habitats, overexploitation, pollution and other threats³[3]. During the last decades, worldwide biodiversity has been lost at an unprecedented rate in all the ecosystems, including agro-ecosystems. Homogenization of agricultural production systems, mainly due to intensification of agricultural systems coupled with specialization by plant and animal breeders and the harmonizing effects of globalization, is one of the greatest causes of agricultural biodiversity loss, through genetic erosion and the increasing levels of genetic vulnerability of specialized crops and livestock. According to the FAO⁴[4], it is estimated that about three-quarters of the genetic diversity found in agricultural crops has been lost over the last century, and this genetic erosion continues. For example, today, 90% of our food energy and protein comes from only 15 plant and 8 animal species, with disturbing consequences for nutrition and food security. Wheat, rice and maize alone provide more than 50% of the global plant-based energy intake.

In addition to agricultural biodiversity, modern agricultural practices can also impact biodiversity in other ecosystems through several ways such as unsustainable demands on water (for irrigation for example), overgrazing, as well as excessive use of nutrients and chemical inputs to control weeds, pests and diseases that result in problems of pollution and eutrophication. Furthermore, land and habitat conversion (in particular forests, wetlands, and marginal lands) to large-scale agricultural production also cause significant loss of biodiversity.

National Context

Georgia is rich in biodiversity. It is one of the 34 "biodiversity hotspots". The Red List of Georgia contains 134 animal species and 56 plant species; 42 of the animal species and 18 of the plant species are categorized as endangered or critically endangered. Georgia's biodiversity underpins ecosystem functioning and the provision of ecosystem services essential for human well-being. It includes the ecosystems and habitats which harbour animals and plants that are used for food and other purposes and which provide life-sustaining services.

Wild flora of Georgia includes about 4,130 species of vascular plants, from which 120 species are trees, 240 " shrubs and about 3,800 " herbs. The 10 leading families, in terms of diversity and content of endemic species are *Compositae* (538 total, 51 endemic), *Gramineae* (332 total, 15 endemic), *Leguminosae* (317 total, 34 endemic), *Rosaceae* (238 total, 63 endemic), *Cruciferae* (183 total, 11 endemic), *Scrophulariaceae* (179 total, 14 endemic), *Umbeliferae* (177 total, 21 endemic), *Labiatae* (149 total, 9 endemic), *Caryophyllaceae* (135 total, 10 endemic) and *Liliaceae* (129 total, 10 endemic). Out of all the vascular species distributed in Georgia, 380 (9,0%) are endemic to the country and 600 (14,2%) are endemic in the Caucasus region. The generic endemism of Georgia's flora is also high. There are 16 endemic genera in the flora of Georgia, which are endemic to the Caucasus at the same time: *Alboviodoxa*, *Woronowia*, *Chymysydia*, *Trigonocaryum*, *Symphyoloma*, *Pseudobetckea*, *Charesia*, *Mandenovai*, *Sredinskaya*, *Cladocheta*, *Pseudovesicaria*, *Gadellia*, *Agasyllis*, *Paederotella*, and *Kemulariella*. Georgian flora is also characterized by high level of relicts, it contains the several " geographic, climatic and age relicts of plant species. More than 2,000 species of the Georgian flora have direct economic importance for food, timber, edible fruits and nuts, forage and fodder, medicine, colorants, industry and essential oil production.

Agricultural land covers 43.5% of the country's total area. The area of arable land is about 790 thousand ha (11.5%), while the permanent crops (permanent plantations) cover about 268 thousand ha (3.8%). Hay meadows spread over 142 thousand ha, while the pastures occupy 1,800 thousand ha. The forests cover almost 40% of the country area. All agricultural lands along with forests occupy as much as 83.5% of the total area of Georgia⁵[5]. In addition, there are many traditional varieties and wild relatives of cultivated species. A variety of crops, such as cereals (wheat, barley, rye, sorghum, millet), legumes (fava bean, grass pea, chickpea, lentil, cowpea), also flax, onion, garlic, and various fruits (grape, apple, pear, quince, medlar, peach, apricot, plum, cherry, cornelian cherry, etc) have been cultivated here from ancient times. Flora of Georgia contains about 100 families and 350 species of grain crops and about 100 species of seed or stone fruit-trees, nuts and wild berries. There are about 500 local varieties of grape recorded in the country, however only 300 of them can be found in live collections, scientific research institutes and local farms recently. Georgia belongs to the West Asian center of origin of the cultural plants where barley, wheat, pea, lentil, vetch, grapevine and numerous fruit trees have originated.

During the last century, biodiversity has been lost at an unprecedented rate in all the ecosystems of Georgia, including agro-ecosystems. Homogenization of agricultural production systems, mainly due to intensification of agricultural systems, is one of the greatest causes of agricultural biodiversity loss, through genetic erosion and the increasing levels of genetic vulnerability of specialized crops. After the collapse of the Soviet Union genetic resource conservation and maintenance, both in nature and off-site (in situ and ex situ), became disordered and disorganized. The Sukhumi Vavilov station in Georgia, was destroyed in the civil war. During last three decades the number of local endemic crops have been decreased predominantly because of increased level of uncontrolled introduction of cultivars from outside of Georgia.

In addition to the human driven biodiversity loss, it is widely recognized that climate change can be viewed as one of the key factor contributing to biodiversity loss⁶[6]. Climate change process is considerably activated in Georgia. The study of climate change in the recent period in Georgia has revealed a very pronounced picture of warming, which is mainly caused by the increase of summer and autumn temperatures throughout the country and by the increase of air temperature and wind speed. In 1986-2015, compared to 1956-1985, the mean annual ground air temperature in the country increased almost everywhere, depending on the regions - in the range of 0.25-0.58°C. The average increase in the territory of Georgia is 0.47°C. The most significant warming was observed in Samegrelo-Zemo Svaneti, Kakheti and Samtskhe-Javakheti, where the temperature increase was 0.4-0.7°C. During the same period, the annual precipitation in western Georgia has mainly increased, while it decreased in some eastern regions. Base of the study of climate change modeling, the average annual temperature will increase from 1.6°C to 3.0°C throughout the country in the period of 2041-2070 compared to 1971-2000 years period. The average annual temperature continues to grow in the period of 2071-2100 and will rise to the range of 0.4°C-1.7°C. As a result, the temperature rise for this period is within the range of 2.1°C-3.7°C compared to the 1971-2000 average. According to the climate scenario for the second forecast period (2071-2100), the average annual temperature in Samtskhe-Javakheti will increase by 2.8°C and the average annual precipitation will decrease by 12%, making the biodiversity of the region more vulnerable to pests and fires⁷[7].

It has to be noted that COVID-19 pandemic have had its impact on biodiversity as well. Despite to the accruing positive effects of the pandemic (reduced air/water pollution, short-term disruption in wildlife trafficking and ecosystem restoration due to lockdowns) prevailing problems such as indiscriminate exploitation of wildlife resources, tourism revenue losses, staff absenteeism/poor performance, increased human dependence on natural resources, disruptions of field/research work, and species monitoring would continue. Consequently, the conservation community must be ready to respond appropriately⁸[8]. When the COVID-19 crisis is under control, the Project will provide solutions to decision makers how to incorporate improvement of soil fertility, avoiding habitat loss and fragmentation, reversing the loss of biodiversity into COVID recovery plans.⁹[9] Project based nature-based solutions will be promoted as part of the recovery efforts in the wake of the COVID-19 pandemic¹⁰[10].

Georgia is primarily an agricultural country, and women are crucial participants and contributors to agricultural development. Nonetheless, the contribution of women to agricultural production remains under-recognized. According to the studies¹¹[11], the social status of women in rural areas remains low, gender stereotypes persist and there is low awareness on existing gender inequalities. This implies a rigid division of gender roles and decision making within the household and family farming that directly and negatively affects women's economic opportunities. Significant gender pay gap and women's overrepresentation as unpaid workers is also a barrier for their economic empowerment. Generally, there is a gender gap in technical and professional expertise in agriculture and rural development, as well as lack of access to information, innovation and knowledge. Women have limited access to new technologies, ownership of land and other property. With better agricultural knowledge rural women could enhance their farms' production and raise standard of living for their children and families.

In line with the multi-year *work programme in the sphere of agricultural biodiversity*¹²[12] of the Convention on Biological Diversity, which was adopted in 2000, Georgia implemented¹³[13] activities relating to the assessment of agricultural biodiversity component and collection of genetic materials. For example, National Report on Animal Genetic Resources was prepared with FAO's support (*Georgian National Cattlemen Association, 2004-2005*) and animal genetic resource catalogue was issued. As a result of multi-year researches, the Botany Institute identified the systematic floral composition of cultivated plants, their endemic varieties and indigenous species. The collected data were assumed as a basis of floras and checklists of grain-crops, legumes and other groups of plants cultivated in Georgia. In order to promote local capacities for management and conservation of plant genetic resources for food and agriculture, Elkana NGO conducted consultations and workshops for local farmers within the framework of GEF/UNDP project 'Recovery, Conservation and Sustainable Use of Georgia's Agricultural Biological Diversity'. Elkana's training center conducted the biological agricultural industry course, focused on conservation and sustainable use of agricultural biodiversity. One of the aims of 'Recovery, Conservation and Sustainable Use of Georgia's Agricultural Biological Diversity' consisted in advocacy and assistance for sustainable management of agricultural biological resources. On a whole the project implementation was assessed as successful; however, several shortcomings were identified¹⁴[14] after the completion of the project, such as: no clear project definition of a land race; specific weaknesses in the in situ conservation of CWR strategy and approach; no clear strategy to address the enabling environment to support agrobiodiversity conservation and weaknesses in the adaptive management approach to the conservation of in situ CWR and on-farm resources; and lack of capacity to test the biological safety of seeds and related considerable research needs to be undertaken with respect to the rigorous scientific testing of land races for drought / frost resistance, pest tolerance etc and authentication of land races with respect to their genetic identities.

Policy and Regulatory Framework

Territorial protection of biodiversity and in-situ conservation of agricultural biodiversity. Out of the above listed laws, the Law of Georgia 'On the System of Protected Areas' deserves special mentioning

in terms of conservation, in-situ conservation and sustainable use of biodiversity. Agricultural lands and farms on the territory of protected landscapes and multiple-use areas can be used for sustainable agricultural.

Georgia's Second National Biodiversity Strategy and Action Plan (NBSAP-2)¹⁵[15] was adopted in 2014 for the period of 2014-2020. Agrobiodiversity related national target was formulated in NBSAP-2 in the following way: "By 2020, the management of agricultural ecosystems and natural grasslands is improved". Currently, preparation for development of Georgia's Third National Biodiversity Strategy and Action Plan " NBSAP-3 (2021-2027) is underway, though it is not clear yet whether agrobiodiversity related national target/s will be integrated into new Strategy and Action Plan or not. NBSAP-2 defined the following strategic approach regarding agrobiodiversity: Inventories of wild edible plants need to be conducted; Red List of Genetic Resources Important for Food and Agriculture to be created; Representative sites of high wild edible plants richness to be identified and mapped; The conservation of endemic agricultural species (wild edible plants) and micro flora of traditional fermented products needs to be ensured through *on farm* conservation measures; Strategic documents related to the sustainable management of agricultural ecosystems and natural ecosystems to be developed and relevant activities to be incorporated in local action plans; To mitigate all factors that have a negative impact on agricultural ecosystems, biodiversity and natural grasslands; The legal and institutional framework to be improved to facilitate the conservation of agricultural ecosystems; The impact of climate change on agrarian biodiversity to be assessed; Public awareness activities to be conducted focusing on (i) the values of the country's agricultural biodiversity and (ii) informing the public on the steps they can take to conserve and sustainably use agricultural biodiversity. According to the latest assessment¹⁶[16], practically none of the actions above had been implemented.

In 2019 Georgia became a party to the **International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)**¹⁷[17]. The treaty aims at guaranteeing food security through the conservation, exchange and sustainable use of the world's plant genetic resources for food and agriculture. The treaty's objective is to protect genetic resources (genetic material) of crops and their wild relatives through creation of genetic resource banks (*ex-situ conservation*), their protection and conservation in agricultural fields (*in-situ conservation*) and through functioning of international genetic resource exchange mechanisms.

In 2019 Georgian Government adopted **Agricultural and Rural Development Strategy of Georgia for 2021-2027**¹⁸[18] and its **Action Plan for 2021-2023**¹⁹[19]. Agriculture and rural development have an important role to play in the country's sustainable economic development and inclusive economic growth. One of the goals of the strategy is the sustainable use of natural resources, retaining the eco-system, adaptation to climate change. However, despite a fact that the Strategy is targeting sustainable use of natural resources, retaining the eco-system, adaptation to climate change by maintaining agrobiodiversity, its Action Plan for 2021-2023 does not cover any of the agrobiodiversity related activities. The strategy applies gender lens for sectoral analysis, underlying the importance for women's engagement in lower-income activities in comparison to men. The strategy accentuates

women's role in agricultural development, while emphasizing existing gender disparities in agriculture and other spheres of economy.

With the purpose of introducing a quality seed and plant materials on the market and introducing a certification system for seed and planting materials, national legislative basis was created that meet the international regulations and standards, and the mandatory certification system was enacted for crops (wheat, barley), together with the voluntary certification system for planting materials. However, this legal framework requires improvement in terms of integration of agrobiodiversity specific considerations. This legal framework consists of number of international conventions, national legal acts and technical regulations:

- ? International Convention for the Protection of New Varieties of Plants (UPOV) Convention²⁰**[20]**
 - ? Act on New Breeds of Animals and Varieties of Plants²¹**[21]**
 - ? Registration Rules for Breeder's Rights on New Breeds²²**[22]**
 - ? Distinctness, Uniformity and Stability (DUS) of New Varieties of Common Wheat (Bread Wheat) - *Triticum aestivum* L.²³**[23]**
 - ? Expert Board for Evaluation of Results of DUS of New Breeds²⁴**[24]**
 - ? Additional Requirements for Distribution of New Breeds²⁵**[25]**
 - ? International Treaty on Plant Genetic Resources for Food and Agriculture - ITPGRFA²⁶**[26]**
 - ? Act on Permission for Distribution of Agricultural Plant Species Subject to Mandatory Certification, and on Seed Production²⁷**[27]**
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- ? List of Agricultural Plants Subject to Mandatory Certification²⁸**[28]**
- ? Procedure for Certification of Seed and Planting Material of Agricultural Plant Species Subject to Mandatory Certification²⁹**[29]**
- ? Procedure for Labelling of Seed and Planting Material of Agricultural Plant Species Subject to Mandatory Certification³⁰**[30]**
- ? Organisational and Methodological Scheme for Testing/Assessment of Species Value for Cultivation and Use [VCU] ³¹**[31]**
- ? National Catalogue of Agricultural Plant Varieties and Guidelines for its Maintenance³²**[32]**
- ? Regulation Determining Terms for Placing Seeds of Cerial Crops on the Internal Market ³³**[33]**

- ? Agreement Establishing the International Organisation of Vine and Wine³⁴**[34]**
- ? Vines and Wine Act³⁵**[35]**
- ? Production of Vine Grafting Materials and Vine Planting Materials³⁶**[36]**
- ? Viticulture Zones and Subzones in Georgia and Corresponding Recommended Range of Vine Species³⁷**[37]**
- ? Certification of Vine Grafting Materials and Vine Planting Materials³⁸**[38]**
- ? Marketing of Material for the Vegetative Propagation of the Vine³⁹**[39]**

Area of Intervention: Samtskhe-Javakheti Region

The project will be carried out on the territory of the Samtskhe-Javakheti region in all six municipalities of the region. The region has been selected based on extensive consultations with the

MEPA Departments/Agencies, Government Agencies, and Representatives of the Regional Administration of Samtskhe-Javakheti, and based on the following technical criteria:

- ? Existence of globally important agrobiodiversity in the region (e.g., vine and wheat land races and their wild relatives);
- ? Existence of multiple typical problems regarding sustainable agrobiodiversity management in Georgia, such as loss and unsustainable use, complexity of terrain and geographic features, types of soil layers, patterns of the local agricultural activities and lack of regulatory mechanisms leading to effective agrobiodiversity-based agriculture and eco-tourism;
- ? The importance of the agriculture sector to the region (GDP share and share of the population employed);
- ? Dependence of rural population on agricultural lands as a source of livelihoods;
- ? Complementarities with biodiversity and agriculture national strategies.

Samtskhe-Javakheti is a region in the South-East of Georgia. Its area is 6,421 km². The total population of the region is about 152.1 thousand (2020 census), which is about 5% of Georgian population. Population density is 32 people per km².

Samtskhe-Javakheti region consists of 6 administrative-territorial units - municipalities: Adigeni, Aspindza, Akhaltsikhe, Akhalkalaki, Ninotsminda and Borjomi. Municipalities are independent, self-governing bodies which act on the basis of rights and responsibilities granted under the Local Self-Government Code of Georgia of 2014⁴⁰[40]. Head of each municipality is the Mayor who is elected through universal vote by all residents of the municipality. Legislative body of a municipality is elected Municipal Council (*Sakrebulo*), while executive functions are performed by the Municipal Administration. The region comprises 353 settlements including five towns: Akhalkalaki, Akhaltsikhe, Borjomi, Vale, Ninotsminda; and seven townlets: Bakuriani, Bakuriani Andeziti, Tsagveri, Akhaldaba, Adigeni, Abastumani, Aspindza; and 254 villages. 31% of the population live in urban areas, and 69% in the villages. Distribution of land resources by main land use categories and municipalities in Samtskhe-Javakheti Region is shown in Table 1.

Table 1. Distribution of Main Land Use Categories in Samtskhe-Javakheti Region by Municipalities as of January 01, 2020 (ha)⁴¹[41]

Main Land Use	Adigeni Municipal	Aspindza Municipal	Akhaltshikhe	Akhalkalaki	Ninotsminda	Borjomi Municipal	Total for
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n/n	Categories	ity	ity	Municipal ity	Municipal ity	Municipal ity	ity	Samtsk he- Javakh eti Region
1	Arable Lands	4,529	5,071	8,537	31,189	26,824	4,311	80,461
2	Permanent Plantations	886	375	1,996	116	152	160	3,685
3	Pastures	26,399	48,252	36,709	60,124	88,124	36,458	296,066
4	Rural Household Plots/Yards with complex cultivation pattern	1,880	825	2,024	3,102	2,017	911	10,759
5	Agricultur al Lands (1+2+3+4)	33,694	54,523	49,266	94,531	117,117	41,840	390,971
6	Forest lands	40,784	15,0 29	42,8 68	6, 908	2,9 84	72, 242	1 80,815
7	Other Land Use (<i>built area, water bodies, industrial sites, infrastructu re, non- used lands /e.g., wetlands/ etc.</i>)	5,482	12,948	8,896	22,061	15,299	4,818	69,504
8	Non- Agricultur al Lands (6+7)	46,266	27,977	51,764	28,969	18,283	77,060	250,319
9	Grand Total (5+8)	79,960	82,500	101,030	123,500	135,400	118,900	641,290

Out of all main land categories, pastures occupy 46% (296,066 ha) of the total land area (641,290 ha) of the region. The region is rich in water and mineral resources.

Samtskhe Javakheti is rich in natural forests. Forests occupy about 27.5% of the total land area of the region. Almost all the forests in this region have a significant role of regulating the climate, protecting the soil, regulating water flow, which is why the region is so wealthy in mineral waters and resort areas. There are 17 endangered species of plants in the region protected by the Red List.

Samtskhe-Javakheti is an agrarian region where the agriculture has the largest share of the total value added. Most of the human resources are employed in agriculture. The share of agriculture in the region's total value added in recent decades was approximately 33%, higher than the same figure in other industries of the region and other regions of Georgia. The region's agriculture is made up of family farms and commercial farms. Over 90% of production is accounted for by family farms. 73% of family farms produce agricultural products for own use, and for the remaining 27% agriculture is a source of income.

When it comes to women's participation, as studies indicate issues can be grouped in two main directions: economic factors and cultural dimension, which incorporates traditional mentality and stereotyping on women's role primarily as caregivers⁴²[42]. In terms of economic decision-making in rural settlements, studies have shown that in 51% of cases decision on the price and quantity of the production to be sold is made by a man in Georgia⁴³[43].

The level of commercialization of agriculture in the Samtskhe-Javakheti region is higher than in the country. About half of agricultural land is pasture. Second largest type of agricultural land is arable land. The remaining area consists of mowing lands, uncultivated land and perennial plants. The plants grown in the region are potato, cereals and vegetable. In the Samtskhe-Javakheti region, the area of annual crops has reduced for recent decades by 10%⁴⁴[44]. However, currently the reduction slowed down to half, and even lower, rate, both in the region and in the whole country. Samtskhe-Javakheti region traditionally is known as one of the richest areas of Georgia ⁴⁵[45], ⁴⁶[46], ⁴⁷[47], ⁴⁸[48], ⁴⁹[49] with agrobiodiversity, especially with wild edible plants - endemic wheat and vine (grape) land races and their CWRs. However, currently only one vine (grape) race is cultivated in the region.

Cereals ? the region?s contribution to production of barley is significant ? constituting on average 35% of planted area and 42% of Georgia?s total production. The average yield in the region is 18% higher than the country?s average. Both the planted area of cereals and the yield have a decreasing tendency. Production of perennial plants, unlike annual plants is characterized with less volatility and less noticeable decline. Because of unavailability of local varieties, seeding material is primarily imported from the European countries. In recent years, Ukrainian, Armenian and Turkish seeds were also imported but their quality is relatively low. Nearly all municipal centers have stores with a large assortment of plant protection products of both high and relatively low quality. Pesticides are used basically for potato growing. Most popular fertilizers are organic fertilizers and ammonium nitrate.

Wheat land races and CWRs: Georgia is one of the most important centers of diversity of the domesticated wheat. Georgia is the only country in the world where all the genomes (AA, AABB, AAGG, AAGGAA, AABBDD) of the wheat can be found⁵⁰[50]. Despite the small territory Georgia is the only country in the world where 15 species (s. str.) of wheat (*Triticum boeoticum* Boiss., *T. monococcum* L., *T. dicoccum* (Shrank) Sch?bl., *T. palaeocolchicum* Menabde, *T. timopheevii* (Zhuk.) Zhuk., *T. durum* Desf., *T. turgidum* L., *T. carthlicum* Nevski, *T. macha* Dekapr. & Menabde, *T. zhukovskyi* Menabde & Ericzjan, *T. turanicum* Jacubz., *T. polonicum* L., *T. spelta* L., *T. compactum* Host, *T. aestivum* L.) are present. Among them 5 species (*T. macha*, *T. palaeocolchicum*, *T. timopheevii*, *T. zhukovskyi* and *T. carthlicum*) are endemics to Georgia. The same diversity is found in the material obtained from the archaeological excavations. Georgia is the only country in the world where all 7 species of hulled wheat are present (among them 4 endemic species). Georgian endemic, hulled wheat species play important role in the evolution of wheat. They represent ancient, relict taxa, showing all directions and transitional stages in wheat evolution from diploid to tetraploid and hexaploid species. In Georgia, relict tools used to collect hulled wheat spikes (with brittle rachis) have survived to present day. This is a woody tool, known as ?*Shnakvi*?, originally created for wheat, and a stone mortar for dehusking (peeling) of ears of hulled wheat - *makha*, *zanduri* and *asli*. None of the above species and/or land races are cultivated in Samtskhe-Javakheti region at present time.

Vine (grape) land races and CWRs: In accordance with the natural conditions of Georgia, different grape varieties adaptable to the micro agro-climate regions are incubated. There are about 450-500 vine (grape) local varieties known in Georgia⁵¹[51]. The grapevine species of Samtskhe-Javakheti, by their morphological and agricultural features, are closer to the grapevine species of central part of Georgia (Kartli). These species are early ripening and more resistant to frost. According to the research and survey data⁵²[52], in ancient times in Samtskhe-Javakheti, the following species were distributed: Tetri Budeshuri, Tavtsetskhla, Tita, Tetri Tskhenisdzudzu, Melikuda, Kharistvala, Klertmagara, Arichuli, Andriuli, Bejana, Saperavi, Red Tskhenisdzudzu, and others. Based on exploration of old literature sources, the following names were added: Tsiteli Budeshuri, Shavi Saghvine, Mtsvane and Tsvrilmartsva. The majority of these species has not reached the present day. In 60?s of the Last century, in Samtskhe-Javakheti, one or two roots in vineyards could be found with the vines of Tetri Budeshuri, Chinuri, Gorian Mtsvane, Gorula, Tskhenisdzudzu, Tita of Kartli, Ganakharuli, Shavi Grape, Kharistvala, Rkatsiteli, and Tita. Instead, considerable number of species from central part of Georgia (Kartli) and other regions of the country were brought into Samtskhe-Javakheti by the Institute of the Viticulture and Enology. These species adapted well to Samtskhe-Javakheti and since then have become widely used in agricultural production, namely: Chinuri, Aligote, Gorian Mtsvane, Khikhvi, Shavkapito, Shasla Tetri, Pino Shavi, and Tita of Kartli. Currently, more reliable sources of vine (grape) land races and/or their CWRs native for Samtskhe-Javakheti region, are those which are included on the following international and European lists and catalogues for vine varieties:

- ? International List of Vine Varieties and their Synonyms⁵³**[53]**
- ? OIV Descriptor List for Grape Varieties and Vitis Species⁵⁴**[54]**
- ? Vitis International Variety Catalogue (VIVC) ⁵⁵**[55]**
- ? The European Vitis Database - Genetic Resources of Grapes⁵⁶**[56]**
- ? The European Vitis Database⁵⁷**[57]**

Samtskhe-Javakheti region is best suited as intervention area of the project for *in-situ* activities.

Agrobiodiversity related pressures and drivers for Samtskhe-Javakheti region could be regarded as:

Inefficiencies in agrobiodiversity resource use and management: Absence of **efficiency** that refers to barriers preventing full adjustment of potential markets for agrobiodiversity resources, so that resources are either unused or misused.

Weak land tenure systems: Lack of clarity on land tenure rights leads to inefficient agriculture that, *inter alia*, prevents development of agrobiodiversity based alternative livelihoods (or improved sustainability of existing livelihoods) benefiting local communities. Secure access to enough land is an important means of achieving food security and investing in dietary diversity.

Climate change: Observed water availability and frequent and long-lasting droughts resulting in reduced productivity and flora change. Diversity in crop species and varieties is an essential component of adaptation to change, particularly climate change, and to improving resilience in agriculture. The continuing loss of traditional agrobiodiversity resources in the Samtskhe-Javakheti region, and the consequent loss of crop and genetic diversity, is a major threat to the sustainability of production, to resilience in the face of climate change, to ecosystem function and to farmer and communities' livelihoods.

Poverty: Lack of opportunities in rural areas and low levels of education lead to food insecurity, marginalization of the population, and migration of youth that in turn prevents local farmers and communities from enjoying alternative livelihood opportunities based on sustainable agrobiodiversity management. Adoption of agrobiodiversity-friendly farming approaches can enhance productivity and increase monetary returns.⁵⁸**[58]** Women, youth and people with disabilities can be considered as more vulnerable and less likely to participate in economic activities in rural areas, due to socio-economic and

cultural barriers. Currently, there is lack of sex disaggregated up-to-date data by regions, however specific information on Samtskhe-Javakheti can be obtained during the PPG or implementation.

Weak governance and inter-institutional coordination on agrobiodiversity issues: Governance of agrobiodiversity?defined by a set of relationships that influences the access to and conservation, exchange, and commercialization of agrobiodiversity, have impact on sustainable use of agrobiodiversity. Local governance and inter-institutional coordination system lacks clear criteria and coordination and collaboration across agrobiodiversity sector and is still limited and/or not effective.

In addition, some sources⁵⁹[59],⁶⁰[60] also suggest that strive for higher productivity of the primary agricultural production may threaten agrobiodiversity in Samtskhe-Javakheti region if local varieties and breeds are increasingly substituted with newly bred foreign ones.

Barriers that need to be addressed

The long-term solution sought by the project is to mainstream agro-biodiversity conservation into agriculture sector of Samtskhe-Javakheti Region of Georgia. However, the following barriers are preventing this solution.

Barrier 1 - Weak agrobiodiversity policy framework to achieve sustainable use of agrobiodiversity resources: The lack of appropriate specific policies and regulatory framework is a major obstacle for the conservation and sustainable use of the agricultural biodiversity in Georgia. Georgian legislation fails to define the values and conservation mechanisms of agricultural biodiversity. There is no legal definition for agricultural biodiversity in the environmental and other sectoral legislation. The legislation does not specifically address adapted wild edible plants, traditional agricultural landscapes, traditional products and associated traditional knowledge as part of the country?s cultural heritage. The roles and competences of specific governmental agencies and research institutions in respect of ex-situ and in-situ conservation of agricultural biodiversity are not defined. It is important to identify the actors involved, from local to global, to understand the power dynamics that influence the interactions among these various actors and their ability to influence or control the management of agrobiodiversity.⁶¹[61] Strengthening of policy and regulatory framework will address the threat to agrobiodiversity through creating legal instruments for agrobiodiversity conservation and sustainable use.

Barrier 2 -Lack of examples of diversified agricultural biodiversity-friendly practices and products: There is limited access to seed and planting materials; lack of specific knowledge on the cultivation of concrete local varieties of adapted wild edible plants; low recognition of adapted wild

edible plants and their products on the market and lack of pilot sites that demonstrate sustainable use of agrobiodiversity. In addition, little knowledge or skills exist on linking sustainable agrobiodiversity and agrobiodiversity based agrotourism value chains. Generally, women, youth, and persons with disabilities tend to be marginalized or vulnerable in the rural setting in terms of access to resources and information. Therefore, the project will aim at ensuring their integration and broader access to relevant resources, services and information through focused targeting during the implementation phase.

Tourism potential of agrobiodiversity is not known. Most households produce agriculture products mainly for self-consumption under poor financial, technical and infrastructure conditions. Past agrobiodiversity initiatives had limited access to seed and planting materials and knowledge on the cultivation of local varieties of adapted wild edible plants and their low recognition on the market. This is connected with poor breeding and production of seed and planting material of local varieties, as well as of the starter cultures of traditional foods. The current agricultural practice in the pilot region fails to promote best practices (e.g. sustainable use of chemicals, modern irrigation and land cultivation technologies), use of agroecological techniques such as landscape planning, windbreaks, crop rotation, soil filtering, etc. It also fails to facilitate the development of organic farming. Farmers can achieve in situ conservation if they are supported with proper incentives. Agrotourism is a good way of improving the income of the local farmers for conserving agro-diversity. In order to strengthen the gender component, incentives will be tailored to specific needs of male and female farmers during the project implementation phase. Georgia is lacking good examples of agrotourism. There is a potential yet limited know-how in creation of new products and branding opportunities of agricultural biodiversity friendly products. Agrotourism has potential to generate demand for such products. However, agro-eco tourism attractions are limited in the regions.

Barrier 3 - Limited data on agrobiodiversity resources for decision-making: There is limited national data on agrobiodiversity and limited understanding on agrobiodiversity. Comprehensive surveys and inventory do not exist for the targeted species (vine and wheat varieties). No inventory has been made for adapted wild edible plants. The general public is not aware of the importance of agro-biodiversity. There is limited coverage of agricultural biodiversity in the mass media, and these issues are not adequately reflected in school curricula and textbooks. Therefore, appreciation of agrotourism and agrobiodiversity as a resource for development and wellbeing is inadequate. There is a limited capacity and know-how on producing agro-biodiversity friendly products and services in tourism and agriculture sector in the selected Samtskhe-Javakheti Region. Dietary diversity based on local varieties is limited. Especially, new dietary recipes promoting eco-tourism needs improvement.

2) Baseline scenario

National Baseline

The Government of Georgia is committed to addressing agricultural challenges through a holistic approach that addresses food security, economic competitiveness, land reform, and sustainable land management, with gender as a crosscutting issue, as also mentioned by the National Agriculture and Rural Development Strategy 2021-2027. The approach focuses on reversing land degradation and sustainably increasing land productivity and efficiency and that is reflected in recently adopted

Agricultural and Rural Development Strategy of Georgia for 2021-2027⁶²[62] and its Action Plan for 2021-2023⁶³[63]. According to the Strategy agriculture and rural development has an important role to play in the country's sustainable economic development and inclusive economic growth. However, despite a fact that the Strategy is targeting sustainable use of natural resources, retaining the ecosystem, adaptation to climate change by maintaining agrobiodiversity, its Action Plan for 2021-2023 does not cover any of the agrobiodiversity related activities.

Georgia's Second National Biodiversity Strategy and Action Plan (NBSAP-2)⁶⁴[64] was adopted in 2014 for the period of 2014-2020. It contained agrobiodiversity related national target. Currently, preparation for development of Georgia's Third National Biodiversity Strategy and Action Plan - NBSAP (2021-2027) is underway, though it's not clear yet whether agrobiodiversity related national target will be integrated into new Strategy and Action Plan or not.

The following internationally and nationally supported projects contribute to the proposed project's baseline:

The European Neighborhood Programme for Agriculture and Rural Development (ENPARD) was launched in Georgia with the goal of reinvigorating the agricultural and rural sectors in the country by supporting the Government's Agriculture Sector Strategy, strengthening small farmers' organizations, and enabling sustainable rural development. ENPARD is composed of a variety of aid modalities, from direct budget support to the Government to technical assistance and small grants to NGOs. The total budget for ENPARD in Georgia for 2021-2024 is estimated at US\$ 40 million.

The Ministry of Environmental Protection and Agriculture of Georgia (MEPA) will support project activities with a total of US\$ 1,250,000 co-financing. Recurrent expenditures from MEPA will be covered by the state budget allocations during the project life-cycle through annual state budget lines for operational and programing costs related to biodiversity protection, viticulture development and agricultural research and extension. This co-financing will be partially covered by the following state programs:

Preferential Agrocredit Program⁶⁵[65]: Preferential Agrocredit Program was initiated by the MEPA and is supported by the central state budget funds. The purpose of the Program is to improve the processes of primary agricultural production, processing, storage and sale by providing the legal and natural entities with cheap, affordable long-term and preferential funds. Estimated allocations⁶⁶[66] under the above *Preferential Agrocredit Program* for 2021-2024 will be UD\$ 12 million in total.

Agroleasing Program⁶⁷[67]: Agroleasing Program is managed by the MEPA and is supported by the central state budget funds. The program serves for the development of the agricultural products' added value generating infrastructure. Preferential agroleasing are benefited by the companies, involved in creation of the agricultural products (modern farms, greenhouse, etc.) or engaged in any form of processing of agricultural products (storage, packaging, recycling), or producing packaging materials for the agricultural products, as well as the companies, which have approved the state co-financing

within scopes of the co-financing Program. Estimated allocations⁶⁸[68] under the above *Agroleasing Program* for 2021-2024 will be UD\$ 5 million in total.

Produce in Georgia Program⁶⁹[69]: The Agricultural component of the program ?Produce in Georgia? is jointly implemented by the Ministry of Economy and Sustainable Development (MESD) and the Ministry of Environment Protection and Agriculture of Georgia (MEPA) and is supported by the central state budget funds. This includes co-financing of agricultural primary production and processing by the state, inter alia, for high-technology greenhouses of vegetables, berries, herbs and mushrooms; production of seedlings and saplings; gardens, vineyards, plantations of perennial crops; processing fruits, berries, vegetables, mushrooms, citrus etc. Estimated allocations⁷⁰[70] for agricultural part of the above *Produce in Georgia Program* for 2021-2024 will be UD\$ 40 million in total.

Plant The Future Program⁷¹[71]: *Plant The Future* Program is managed by the MEPA and is supported by the central state budget funds. Co-financing will be carried out in two separate components of the program: a) component of co-financing perennial gardens (hereinafter referred to as ?gardens? component?) and b) co-financing component of the nursery gardens. One of the objectives of the program is support of the local, high-quality, phytosanitary clean planting material (seedlings) production, which will make possible for individuals interested in creating modern, intensive cultivated gardens, offer cheap, local materials for planting compare to imported ones. Estimated allocations⁷²[72] under the above *Plant The Future Program* for 2021-2024 will be UD\$ 25 million in total.

Young Entrepreneur Program⁷³[73]: Young Entrepreneur Program supports young entrepreneurs in rural area desiring to conduct a business activity in Georgia. The program is managed by the MEPA and is supported by the Denmark International Development Agency (DANIDA). Program aims at Promoting of development of young entrepreneurs; Investing in value chains of the agricultural products. Estimated allocations⁷⁴[74] under the above *Young Entrepreneur Program* for 2021-2024 will be UD\$ 15 million in total.

The USAID-funded Zrda Activity in Georgia⁷⁵[75]: ZRDA is a five-year program designed to promote inclusive and sustainable economic growth in target regions by improving micro, small, and medium sized enterprise (MSME) growth; increase productivity of rural households; facilitate market linkages between producers and buyers; and promote local economic development by establishing and strengthening networks. Zrda targets communities in proximity to the administrative boundary lines and communities with ethnic minority populations. The Zrda activity is working in 81 communities within five regions of Georgia to create at least 2,400 jobs, increase sales for at least 860 MSMEs, boost incomes of 13,200 households, and generate measurable improvements in community resilience. ZRDA supports gender mainstreaming, in order for women, men, boys and girls to participate and benefit from development efforts.

Agro Processing and Storage Enterprises Program⁷⁶[76]: Agro Processing and Storage Enterprises Program is initiated by the Ministry of Environment Protection and Agriculture of Georgia (MEPA) with financial support from the state budget. The target area of the program covers all rural municipalities of Georgia. Estimated allocations⁷⁷[77] under the above *Agro Processing and Storage Enterprises Program* for 2021-2024 will be UD\$ 16 million in total.

Baseline in Samtskhe-Javakheti Region

Samtskhe-Javakheti Regional Development Strategy for 2014-2021⁷⁸[78] did not set any specific goal and/or target for agrobiodiversity protection and management for the planned period. This strategy will be outdated by the end of 2021, however currently there is no clear plan for preparation of updated strategy for the next planning period of 2022-2029. The Municipalities in Georgia are the managers of the agricultural lands entrusted to them by the Ministry of Economy and Sustainable Development (MESD). Each municipality allocates with a municipal budget which is distributed to municipal priorities. Furthermore, for priorities identified by a municipal council, various state funds might be available through various institutions such as the Ministry of Regional Development and Infrastructure (MRDI). Their contribution is expected in the form of personnel for implementation and monitoring of pilot activities, communication with and awareness raising of the concerned population, as well as in the and in the form of lobbying with the central government institutions. Akhaltsikhe, Aspindza, Borjomi, Akhalkalaki, Ninotsminda and Adigeni municipalities will allocate US\$ 750,000 each during the project life-cycle through annual municipal state budget allocations for support of local agricultural development. Furthermore, according to 2016 data, only 16% of municipal council members are women⁷⁹[79]. This hinders their engagement in the decision-making processes, which needs to be addressed in order to strengthen women's role in good governance.

GIZ (South Caucasus Office) will provide US\$ 850,000 co-financing investments on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMU) and other German public sector clients operating in Georgia in the following priority areas: Sustainable economic development; Democracy, civil society and public administration; and Environmental policy, conservation and sustainable use of natural resources.

The executing agency, REC Caucasus, will support project activities with a total of grant US\$ 1,200,000 and in-kind US\$ 3,800,000 investments through its projects and programs related to biodiversity, agriculture and rural development. Baseline contribution from REC Caucasus will come in a form of the following projects. (1) EU-funded project *Increasing Local Authorities (LAs) capacities in coordination between national and local levels of government to enhance their contribution to establishment of Vashlovani Biosphere Reserve in Kakheti region as model for inclusive and sustainable growth at local level*. The overall objective of the action is to improve living conditions and quality of life of local communities in Kakheti region through inclusive and sustainable growth. The project addresses deforestation, biodiversity loss, land degradation, and desertification challenges of the region. The specific objective of the proposed action is fostering *sustainable and agrobiodiversity-based traditional land use practices*, defining new ways of understanding and demonstrating holistic approach to sustainable agricultural management in Kakheti region (2019-2022)

co-financing secured: US\$250,000. (2) *UNESCO biosphere reserve establishment in the climate-vulnerable regions: working towards the nomination?*, funded under the International Climate Initiative of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety through GIZ and Michael Succow Foundation. The project focuses on the application of several measures for ecosystem-based approaches (incl. *sustainable and agrobiodiversity-based traditional land-use approaches*) to climate change adaptation, sustainable agricultural management and integrated land-use planning. The project helps local governments in the region to achieve transitional changes to more climate-resilient, sustainable agricultural management and green agriculture by providing them with essential information, tools, technical support and knowledge. (2019-2022) co-financing secured: US\$150,000. (3) *Development of River Basin Management Plans for Alazani/Iori and Khrami /Debeda River Basins in Georgia?*. It addresses existing challenges in both the development and implementation of efficient management of water and land resources. It specifically supports Georgia to move towards the approximation to EU acquis in the field of water management with a focus on EU Water Framework Directive (WFD). As part of River Basin Management planning process, elaboration of GIS maps on land use, data gap analysis, update data on drivers, pressures, impacts, conceptual model linking pressures to impacts, computer modeling/simulations of river pollution from point and/or non-point sources for the Kvemo Kartli, Mtskheta Mtianeti and Kakheti regions are envisaged. The Project's outputs will complement the Complement 2 activities. The Project's duration is 2021-2023. The secured co-financing from this Project will be US\$50,000.

In addition, the project will coordinate with the activities and will build on the lessons-learned from the GEF-funded project *Generating Economic and Environmental Benefits from Sustainable Land Management for Vulnerable Rural Communities of Georgia?* (GEF ID: 9730) and the *Enhancing Resilience of Agricultural Sector in Georgia (ERASIG)?* (GEF ID 5147) project. The project will also draw on lessons-learned from the *Sustainable Agriculture in Adjara?* project financed by the Government of the Adjara Autonomous Republic. The latter project focused on the strengthening of extension services, introduced Sustainable Land Management (SLM) to farmers, and carried out pilot activities on rehabilitation of agricultural lands and will serve as a technical foundation for the scaling out of modern technologies and approaches.

The baseline scenario thus includes a number of important elements to build upon and to implement the sustainable agrobiodiversity and agro-eco tourism management. However, under the business-as-usual scenario, agrobiodiversity of the Samtskhe-Javakheti the region will continue to be unmanaged, undermaintained and underinvested; the gaps in the policy and regulatory framework that enables agrobiodiversity and agro-eco tourism management will remain, the farmers will practice inefficient management approaches, leading to further decrease in agrobiodiversity, loss of economic returns and decreased carbon stocks. Incremental GEF funding is required to pave the way for Georgia to implement sustainable agrobiodiversity management the approach in combination with agro-eco tourism in a timely, coherent, and consistent way to ensure the scaling up.

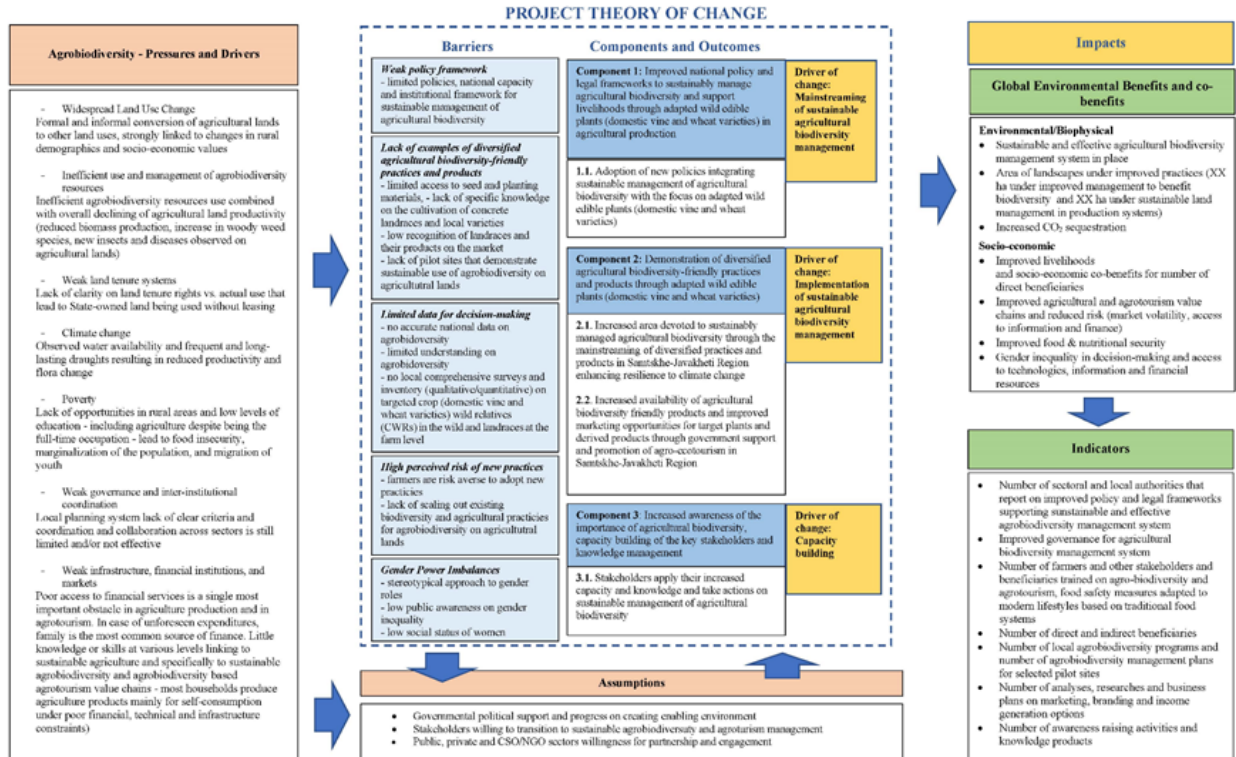
3) Proposed alternative scenario with a brief description of expected outcomes and components of the project

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The project will follow the Theory of Change (ToC) provided below (see a larger version of ToC in Annex D). The project aims at mainstreaming biodiversity in agriculture sector through sustainable management of agrobiodiversity in vulnerable ecosystems and rural communities of Samtskhe-

Javakheti Region of Georgia by strengthening larger-scale policy and regulatory frameworks, demonstrating and scaling-up investment in supporting in-situ conservation and use of plant genetic resources of the ancient vine and wheat varieties throughout farmer management to improve livelihoods of local people, revitalize rurally agrotourism and generate impacts necessary to advance progress at national level.

Project's Theory of Change



To achieve this, the project will focus on three main inter-related components. Component 1 will strengthen policy and legal frameworks enabling sustainably management of agricultural biodiversity and support livelihoods in agricultural production in Samtskhe-Javakheti region. Component 2 will be facilitating technical assistance and investment in diversified agricultural biodiversity-friendly practices and products and Component 3 will support capacity development, knowledge management and M&E for effective and sustainable agricultural biodiversity management.

Component 1. Improved policies, national capacity and institutional framework to sustainably manage agricultural biodiversity and support livelihoods through adapted wild edible plants (vine and wheat varieties) in agricultural production.

Component 1 will focus on development and adoption of new policies and plans integrating sustainable management of agricultural biodiversity and improving national capacity and institutional frameworks to sustainably manage agricultural biodiversity and support livelihoods through adapted wild edible

plants (vine and wheat varieties) in agricultural production. For conservation and sustainable use of agrobiodiversity to be viable, policy and regulatory legislative adaptation will be required at the local and national levels to provide statutory instruments for practical implementation of policies and regulations. The project will assist the government in elaborating a clear national policy regarding agrobiodiversity, in order to provide a defined long term and multi-sectoral context for agrobiodiversity conservation and sustainable use in Georgia, and to establish the various institutional responsibilities and roles for agrobiodiversity conservation to ensure cross-sector awareness and coordination of policy enactment. In addition, the project will address the creation of an effective legal framework for adapted wild edible plants conservation and sustainable use in the project area and whole country.

The project strategy will be to identify and create new legislation needed to support in-situ conservation of adapted wild edible plants and to push through changes and adaptations to strengthen existing legislation, in particular through the development of secondary legislation (by-laws) needed for practical application and enforcement. Agricultural laws regulate some farming activities such as the uses of herbicides, pesticides, and the unsustainable monocultures of industrial agriculture affect agricultural biodiversity. The project will identify the actors involved, from local to national, to understand the power dynamics, which influence the interactions or control the management of agrobiodiversity. A gender analysis will also be performed in order to identify region specific gender inequalities during its implementation phase. The new legal framework will address the policy gaps such in protection of agrobiodiversity, gender equality, rules about farming techniques, mandatory labeling etc. Agricultural biodiversity conservation and sustainable utilization will be made viable and attractive for the farmers through stewardship agreement programs with the private sector in agriculture and tourism sectors, which will reflect the needs of male and female farmers alike. This community-based agreement programs will support agricultural biodiversity friendly farming and contribute to the livelihoods of participating farmers. Finally, technical support will be provided for policy engagement, partnership formation and coordination mechanisms in a gender-sensitive manner. In this regard, Gender and Development (GAD) provisions will become an integral part of the project strategy, taking into consideration gender policies of the GEF, UNEP as well as those of the Government of Georgia (e.g., *Gender Equality Act of 2010*⁸⁰[80]).

Component 2. Demonstration of diversified agricultural biodiversity-friendly practices and products. The aim of the second component of the project is to demonstrate and scale-up investment in supporting in-situ conservation and use of plant genetic resources of local vine and wheat varieties throughout farmer management to improve livelihoods of local people, revitalize rural agrotourism and generate impacts necessary to advance progress at national level. Component 2 is structured through two consequent outcomes.

The main outcome of this Component - **Outcome 2.1** (*Increased area devoted to sustainably managed agricultural biodiversity through the mainstreaming of diversified practices and products in Samtskhe-Javakheti Region enhancing resilience to climate change*) will be achieved through the implementation of the six results based outputs 2.1.1- 2.1.6 aimed at conducting of: Field-based surveys and mapping of the distribution of wild populations of the targeted crop (vine and wheat varieties); Establishing of two nurseries and field seed banks to manage and multiply seeds and seedlings of wild edible plants (vine and wheat varieties) based on the results of the field-based surveys; Identification, planning, and implementation of participatory and sustainable management practices on at least 6 pilot sites (*in total on a land area of 500 ha*), including the establishment of pilot nursery sites, that will support traditional crop varieties of adapted wild edible plants to improve local diversity for marginal environments in the project site pilot locations; Enhancing skills and capacities of farmers and local

communities in the project pilot sites to undertake agricultural biodiversity-friendly farming and other relevant agricultural biodiversity-friendly practices, and community-based approaches through on-job training; Developing agro-eco tourism attractions as an alternative way of sustainable development in the selected communities of the Samtskhe-Javakheti Region (*rural agrotourism, tourism and organic agriculture, activity tourism- grape harvesting and processing*). There is a large and growing market in Georgia for the kind of high-cost, customized tourism where groups of interested people are guided by knowledgeable experts on extended educational visits to sites of ecological significance. Such tourism activities will be designed and managed in close partnership with local communities. Tourism activities will involve such activities as farm and market visits, participation in agricultural activities and food preparation, tastings of local foods and beverages and attendance at specific feasts and celebrations. Some portion of the revenues from such tourism will be channeled back to local communities and used to promote biodiversity conservation. In addition, sustaining the Project results depends on a stronger land tenure system in the target region. One of the requirements for participating in pilot projects will be that the volunteering farmers should have registered their land plots in Cadaster. The Project activities will be used as an incentive to have the farmers register their lands.

Second outcome of the Component - ***Outcome 2.2 (Increased availability of agricultural biodiversity friendly products and improved marketing opportunities for target plants and derived products through government support and promotion of agro-ecotourism in Samtskhe-Javakheti Region)*** will be achieved by putting in place five results based outputs, such as: Analyses on value addition and creation of new products and branding opportunities based on wild edible plants (vine and wheat varieties) for Samtskhe-Jvakhethi region; Marketing research through a supply chain approach for agricultural biodiversity friendly products; Income generation options (bankable projects) through the sustainable production, processing and marketing of agrobiodiversity friendly foods with high nutritional value for low-income rural producers identified and supported with sound economic and financial analysis; Agrotechnical Guidelines for sustainably managing and harvesting priority plants and products and Farmer information system for agricultural biodiversity friendly farming.

Component 3. Increased awareness of the importance of agricultural biodiversity, capacity building of the key stakeholders and knowledge management. Main focus of Component 3 will be the development of capacities and awareness-raising, knowledge sharing and dissemination. The component has only one outcome - ***Outcome 3.1 (Stakeholders apply their increased capacity and knowledge and take actions on sustainable management of agricultural biodiversity)***.

It will be started by implementation of Output 3.1.1 (*National capacity developed to mainstream and promote agricultural biodiversity and agritourism in agricultural production and agrotourism - including capacity development within Georgia's agricultural extension service and government agencies to promote diversified agriculture that integrates the cultivation of wild edible plants (vine and wheat varieties)*) with capacity needs assessment and preparation of capacity building plan for the stakeholders. The project will work with the stakeholders and other relevant partners to identify a number of tools that will be included as part of the various workshops and training, tailored to the needs and roles of both male and female farmers. Output 3.1.1 will include also the development of training modules and school curricula on agritourism and agro-biodiversity, food safety measures, and recipes adapted to modern lifestyles based on traditional food systems, organization of training and development of user-friendly knowledge management and awareness-raising system under the project Web Site available for central and local decision-makers and for the general public.

Studies have shown rural women to be seen primarily as caregivers, with their main duties within families⁸¹[81]⁸²[82]. Lack of finances also hinders their productivity and activity beyond families. The percentage of the men's participation to labor force (80%) is 30 percentage points more than women's participation rate (50%). So, awareness-raising campaigns will integrate and be oriented on breaking stereotypes on conventional gender roles and support creating women's image as change-makers, earners and actors for economic development.

4) Alignment with GEF focal area and/or Impact Program strategies

The GEF-7 programming aims at further advancing the GEF2020 vision that pursues greater impact per unit of investment by tackling the drivers of environmental degradation, promoting greater sectoral and thematic integration, and contributing to systems change in key areas that impact the GEF mission. The GEF-7 Programming Directions are seeking maximum impact across its focal areas through integrated programming.

The project's intervention strategy is in compliance with the GEF-7 Biodiversity Focal Area Strategy, directly addressing program priorities such as:

? *Program priority I* - Mainstream biodiversity across sectors as well as landscapes and seascapes

? *Program priority III* - Further develop biodiversity policy and institutional framework

At the same time, the proposed project is in line with Focal Area Investments in Sustainable Use of Plant and Animal Genetic Resources Inclusive Conservation and Impact Program for Food Systems.

Project proponents will be encouraged to take advantage of opportunities provided through the impact programs to mainstream biodiversity in the agriculture sector.

Under GEF-7 targeted investment for Sustainable Use of Plant Genetic Resources, the conservation and sustainable use of the genetic diversity of cultivated plants, of their wild relatives and of other socio-economically and culturally valuable species, including aquatic, forest, microbial and invertebrate genetic resources is central to achieving food security and nutrition for a growing world population, improving rural livelihoods, developing more sustainable agriculture practices and improving ecosystem function and the provision of ecosystem services in production landscapes. The project will also provide insight on public preferences and priorities on mentioned plants. As climates and production environments change, in often unpredictable ways, genetic diversity is also essential to providing the necessary adaptability and resilience.

Under this targeted investment, the GEF focus is three-fold. First, GEF will provide support to establish protection for adapted wild edible plants in-situ through CWR Reserves. Second, the GEF will support in-situ conservation and sustainable use, through farmer management, of plant genetic resources in Vavilov Centers of Diversity. Third, the GEF will also support conservation and sustainable use of animal genetic resources and actions to conserve the wild relatives of domesticated livestock, not solely focusing on breeds. This focus will complement the thematic and geographic focus of the ?Sustainable Food Systems, Land Use, and Restoration Impact Program?.

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCE, SCCF, and co-financing

Samtskhe-Javakheti Region has been selected because of its rich biodiversity, its location (it is directly adjacent to the Middle East global priority genetic reserve location - priority CWR genetic reserve for wheat /Triticum and Aegilops/ wild relatives) and as a homeland for ancient local vine (*Vitis*) varieties.

In the baseline situation, there will still be an absence of a more prescriptive guidance and policies for sustainable management of biodiversity and a lack of knowledge and awareness of benefits of conservation and use of plant genetic resources throughout in-situ farmer management to improve livelihoods of local people and revitalize rural agrotourism.

Sustainable management of agrobiodiversity is a crucial issue for Georgia. About 50 percent of Georgia's population lives in rural areas, out of which half is female and half male population⁸³[83]. Central and local authorities have yet to develop consistent policy and regulatory frameworks on agrobiodiversity which should integrate sustainable land use, agriculture and other relevant sectoral policies.

This project has been designed as a package of technical, institutional capacity building and demonstrating measures at regional and local (municipal) levels leading to policies that will demonstrate and scaling-up investment in supporting improvement of livelihoods of local population, revitalize rural agrotourism and generate impacts necessary to advance progress at national level. The proposed outputs of the project to be supported by the GEF are outputs that would unlikely occur otherwise under a business as usual scenario. The project will catalyze Georgia's national efforts for achieving biodiversity national targets and GEF's involvement in the implementation of the planned project will ensure sustainable management of agrobiodiversity at both national and regional/local levels.

About \$11.6 million of co-financing is expected from the Central Government, 6 municipalities of Samtskhe-Javakheti Region (in a form of both in kind and grant), GIZ and REC Caucasus. Ministry of Environmental Protection and Agriculture of Georgia (MEPA) will provide \$1,250,000 in-kind contribution towards awareness raising activities, seminars, and workshops in other parts of Georgia. REC Caucasus will contribute by \$3.8 million. Additional possibilities for co-financing from other sources will be explored during the PPG phase.

6) *Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)*

The project is expected to generate global environmental benefits of improved management of landscapes covering **20,000 ha**. This contributes towards the 320 million ha target for the GEF-7 Core Indicator 4, "Area of landscapes under improved practices?". More specifically, the project is aligned with GEF-7 component sub-indicator 4.1, "Area of landscapes under improved management to benefit biodiversity?" and sub-indicator 4.3 "Area of landscapes under sustainable land management in production systems?".

Global Environmental Benefits associated with GEF-7 Core Indicator 6, 'Greenhouse gas emission mitigated' are estimated around **613,041 tCO₂** over the lifetime of the project (4 years implementation and 16 years capitalization period). These estimates prepared in 2021 are based on the EX-ACT tool's methodology.

The project will generate socio-economic co-benefits for **55,000 direct beneficiaries**, including 28,600 women, or 52% of the total; these co-benefits contribute towards GEF-7 Core Indicator 7, 'Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment'.

Maintaining wild agrobiodiversity germplasm *in situ* is more cost-effective than *ex situ* conservation and will allow for the continued evolution of resistances and adaptations. Global environmental benefits include significant option and insurance values, existence values, and direct-use values. For global agriculture, this genetic diversity preserves options to rebuild, preserve, or augment the genetic vitality of local varieties. It also serves as a global insurance policy against catastrophic decrease by providing the genetic potential to thrive in future environments. With this safety net in place, farmers and policymakers have additional time to uncover as yet unknown global benefits in a manner that is consistent with the precautionary principle.

In the long run, the project will also support Georgia's efforts on achieving nationally determined SDGs⁸⁴[84] (*for more details on project support for SDGs see Annex D. Theory of Change*).

As it was already mentioned under the section National Context, COVID-19 pandemic has its negative effects on biodiversity and nature-based solutions in promoting a green and resilient economic recovery in the wake of the COVID-19 pandemic is important. Nature-based solutions are actions that protect, sustainably manage, and restore ecosystems in ways that address societal challenges to provide both human well-being and biodiversity benefits. Nature based solutions include e.g., supporting and funding conservation programmes that helps to protect biodiversity and safeguard ecosystems. Other measures could include promoting environmentally sustainable practices in agriculture, so as to: reduce large-scale deforestation, habitat destruction and fragmentation; strengthen the functioning of ecosystems; and lower the risks of future infectious zoonotic disease outbreaks⁸⁵[85]. The project will incorporate green recovery approaches during demonstration projects related to the diversified agricultural biodiversity-friendly practices of the project component 2.

7) Innovation, sustainability and potential for scaling up

Innovativeness: The innovativeness of this project relates to the fact that project aims at integrating agrobiodiversity into wider agriculture and other sectoral policies and practices. The project promises

development and adoption of agricultural biodiversity friendly policies, and legal framework. In addition, a clear definition of the responsibilities and roles of the various stakeholders and of the coordinating mechanisms will be established. Conservation agreement program will convene local communities, agriculture and tourism representatives for developing and implementing agricultural biodiversity friendly farming. The nurseries and seed banks will help to manage and multiply vine and wheat varieties. The project will help local authorities to look at the whole value chain and develop targeted production and marketing of biodiversity friendly products. A key innovative contribution of the project will be extensive analyses of market demand for agrobiodiversity and rural tourism (agro-eco tourism) products and services within the project area - in Samtskhe-Javakheti Region

Sustainability: The development of alternative livelihoods is one component in an integrated approach to mitigating the threat posed by local communities to agrobiodiversity resources. The project will use baseline studies to assess existing resource use among local population, will undertake education on agrobiodiversity values and ecological systems for local communities, and will organize, when appropriate, resource user associations to guide outreach on environmental education, livelihoods activities, and agricultural micro-credit programs. The final, critical step will be to specifically target the economic problems that underlie the over-dependence of local communities on natural resources and which result in agrobiodiversity loss on private agricultural lands. Focused planning on the strategic approaches and mechanisms needed to achieve appropriate natural resource use and socioeconomic development in the project area will be carried out in consultation with the local authorities, farmer associations, small business, vine and wheat producers and local wine and bakery industry sector representatives, tourism sector, local NGOs/CSOs, and academic institutions.

Scaling Up: The other regions of Georgia are also seeking to implement economically effective alternative livelihoods scenarios including agrotourism. Therefore, there is already a demand for scaling up. The project will ensure inclusion of the stakeholders from other regions and municipalities in the capacity development and knowledge management activities.

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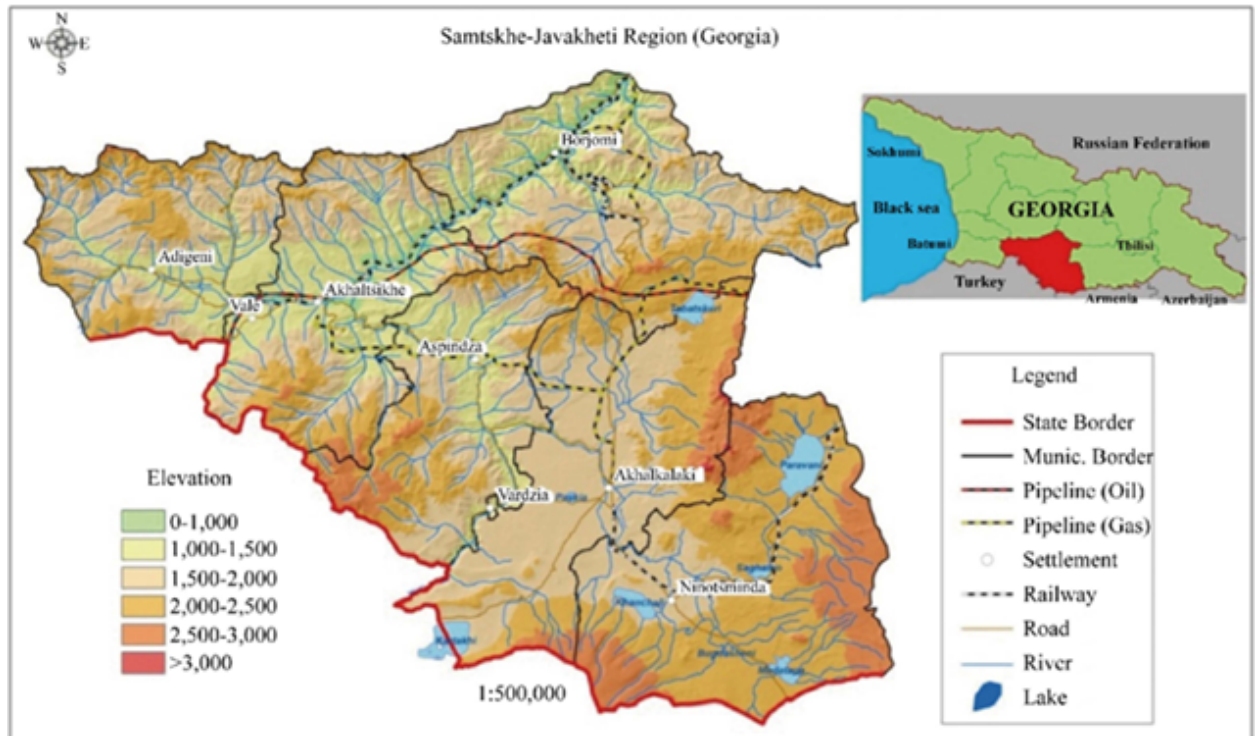
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1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

?



For more details on programme/project map and geographic coordinates please also see Annex A.

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement

During the PIF phase preliminary consultations and information exchange has been done with the following stakeholders: Ministry of Environmental Protection and Agriculture (MEPA); MEPA's Biodiversity and Forest Policy Department (BFPD), Environment and Climate Change Department (ECCD), Scientific-Research Center of Agriculture (SRCA), National Wine Agency (NWA) and Rural Development Agency (RDA); Samtskhe-Javakheti Regional Administration.

Table 4 below describes detailed functions and role of main stakeholders in project execution, as well as in project planning and implementation process.

Table 4. Stakeholder's anticipated role in the project development phase (PPG)

Key stakeholders	Stakeholder's anticipated role in the project development phase (PPG)	Content engagement, contributions to the project (identified by Component)
<p>Ministry of Environmental Protection and Agriculture (MEPA)</p> <p><i>Biodiversity and Forest Policy Department (BFPD)</i></p> <p><i>Environment and Climate Change Department (ECCD)</i></p>	<p>MEPA is the Focal Point for both CBD and ITPGRFA. It is responsible for defining and elaborating directions and policies on environmental protection, sustainable use of natural resources and agriculture. Within MEPA, the BFPD is responsible for coordination, managing and monitoring of policies and activities for the purposes of fulfilment of the CBD, preparation of legislative base / proposals to be submitted to the relevant parliamentary committees, monitoring of planned activities? implementation and reporting to CBD secretariat. The BFPD is directly responsible for the coordination of the development and implementation of the national biodiversity strategy and action plan. The ECCD, as GEF focal point department of MEPA, is taking responsibility for general coordination of GEF-funded projects and leading works to promote the implementation of climate change mitigation/adaptation policies and measures and green economy principles along with SDGs. A representative of the BFPD/MEPA will lead the Project Steering Committee. MEPA will play a crucial role in guiding the elaboration of policy and regulatory instruments under the planned project. Representatives of the relevant departments and units of MEPA will be involved in training sessions.</p>	<p>Components 1,2 and 3</p>

Scientific-Research Center of Agriculture (SRCA)	<p>SRCA is operating under the umbrella of the Ministry of Environmental Protection and Agriculture (MEPA). It was established in 2014 in order to restore the scientific-research activities in agricultural sector. Within its current mandate, functions of the SRCA are: Explore-study, rehabilitate and develop local gene pool of the annual and perennial crops; Set up the genetic bank; Observe, evaluate and adapt the introduced species and varieties of crops in Georgia; Arrange the standardization and certification systems for planting and seedling materials; Study the land pool and restore the soil fertility of Georgia; Endorse the bio-agro (organic) production, promote the ecologically safe food and harmonize it with international standards; Measure the pests and diseases of plants and elaborate the integrated control systems; Explore, restore and improve the population of local breeds of agricultural and animals, poultry, fish and useful insects of Georgia; Research and adaptation of imported breeds; Set up of electronic information bank; Scientifically evaluate the risk probability, revealed in food and forage and work out the recommendations for the risk management bodies; Communicate with the public, international, donor and non-governmental organizations; Develop and promote the extension programs, spread the regional knowledge. SCRA will be direct beneficiary and main counterpart of the project involved in all stages of project planning and implementation.</p>	Components 2 and 3
National Forest Agency (NFA)	<p>NFA, designated as a central agency for forest management in Georgia, is operating under the umbrella of the Ministry of Environmental Protection and Agriculture (MEPA). NFA will take part in developing activities for forest areas within the targeted Samtskhe-Javakheti Region.</p>	Component 1
Protected Areas Agency (APA)	<p>APA, designated as a central agency for protected areas management in Georgia, is operating under the umbrella of the Ministry of Environmental Protection and Agriculture (MEPA). APA will be involved through project planning and implementation activities.</p>	Component 1
Rural Development Agency (RDA)	<p>RDA is operating under the umbrella of the Ministry of Environmental Protection and Agriculture (MEPA). RDA implements variety of projects initiated by the MEPA, managing subordinate agricultural companies and regional and municipal territorial bodies for agricultural extension. RDA will be one of the main counterparts of the project involved in all stages of project planning and implementation.</p>	Components 2 and 3

<p>National Wine Agency (NWA)</p>	<p>NWA has been created under the Law of Georgia on Vine and Wine of 1998 and currently is operating under the Ministry of Environmental Protection and Agriculture (MEPA). Main functions of the NWA are: Research and promotion of Georgian vine and wine culture; Creation of national registry of vineyards; Promotion of organized vintage conduction; Control and certification of wine production quality; Georgian wine promotion and progress of awareness; Promotion of the growth of export potential. The National Wine Agency carries out its activities through cooperation with stakeholders operating in the vine producing and wine industry. NWA will be one of the main counterparts of the project involved in all stages of project planning and implementation.</p>	<p>Components 1, 2 and 3</p>
<p>National Agency for Sustainable Land Management and Land Use Monitoring (NASLM)</p>	<p>NASLM was established in 2019 and became fully operational in the first half of 2020. NASLM is working under the supervision of the Ministry of Environmental Protection and Agriculture (MEPA). Main functions of the NASLM are: a) to draw up a balance sheet for land, to register agricultural land resources and to create an integrated database; b) to participate in the preparation and implementation of state policy and relevant state targeted programmes for the intended use and protection of agricultural land resources; c) to participate in the preparation and implementation of state policy on the sustainable management of agricultural land; d) to participate in the planning of activities in the fight against desertification and land degradation, and in the restoration of soil fertility; e) to participate in the planning and carrying out of activities related to the management of windbreak belts (shelter belts); f) to receive and review applications regarding investment plans related to privately owned plots of agricultural land, to prepare relevant documentation to be submitted to the MEPA, and to supervise the implementation of the investment plans; g) to prepare thematic maps related to land use; h) to participate in the establishment of administrative-territorial borders. The NASLM will be one of the main counterparts of the project involved in all stages of project planning and implementation.</p>	<p>Component 1</p>

Ministry of Economy and Sustainable Development (MESD)	MESD is responsible for coordination of sustainable development policies. Though MESD is not directly involved in environmental and/or agricultural activities, it is in charge for overall coordination work with international multi-lateral and by-lateral donor organizations and countries. By the involvement in the project formulation, MESD's functional departments like Sustainable Development Department (SDD) will help to identify co-financing sources for the project and plan coherent concept and project pilot projects.	Components 1 and 2
Georgian National Tourism Administration (GNTA)	GNTA, designated as a central agency for tourism development in Georgia, is operating under the umbrella of the Ministry of Economy and Sustainable Development (MESD). Goals and objectives of the GNTA are formation and implementation of the Georgian tourism development state policy, promotion of the sustainable tourism development, promotion of a high export income growth and job creation in the country on the basis of the tourism development, attraction of the foreign tourists to Georgia and development of the tourism as well, promotion of human resources development in the field of tourism destinations, infrastructure and tourism. GNTA will be involved in project implementation through planning activities aimed at elaborating of sustainable agrotourism approaches for Samtskhe-Javakheti Region.	Component 2
Ministry of Regional Development and Infrastructure (MRDI)	MRDI has the mandate for oversight of modification and modernization of the country's water supply and sanitation and road networks as well as coordination and monitoring of spatial planning in Georgia. MRDI also sets infrastructure development policies for Georgia. Through its involvement in the PPG phase, MRDI will contribute in development of coherent concept and pilot projects on agrobiodiversity based agrotourism with view of integrated land-use approach to promote and secure long-term project benefits.	Component 2

Municipal Development Fund of Georgia (MDF)	<p>MDF was established in 1997 by the Government of Georgia. The Fund is cooperating with all large investment banks and financial institutions operating in Georgia. It is coordinated by the Supervisory Board approved by the Government of Georgia and the Ministry of Regional Development and Infrastructure of Georgia (MRDI). MDF operates with the objective of assisting to enhancement of institutional and financial capacities of local self-government bodies (<i>municipalities</i>), making investments in local infrastructure and services, and improvement of main economic and social conditions for the local population. MDF implements the significant infrastructural projects (<i>incl. international donors financed projects</i>) such as: arrangement of infrastructure at tourist and cultural heritage monuments, improvement of infrastructure aimed at preventing the natural disasters, arrangement of the cable ways, renovation of sports infrastructure, and enhancement of the component in support of State and Private Sector Investments (PPI). Involvement of MDF in planning activities under the project will be of particular importance for achieving project outcomes and outputs.</p>	Component 2
National Center for Disease Control and Public Health (NCDC)	<p>NCDC is designated as a central agency for public health in Georgia operating under the umbrella of the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs (MoIDPOTLHSA). Early detection and prevention of diseases is NCDC's core mandate. The Center has a significant role in development of country's health care system and improvement of public health. A precondition of implementation of the Center's major objectives is a strong infrastructure, modern laboratories, and most significantly, highly trained human resources.</p> <p>Through its mandate covering, among other functions, development of state rules, standards and regulations for public health, biosecurity and laboratory activity; and preparing for and responding to public health emergencies and disasters, the NCDC will take part in advising taking into account specific health safety needs of women, children, disabled and other vulnerable groups with view of Novel Coronavid-19 considerations.</p>	Component 2

<p>Samtskhe-Javalheti Regional Administration and 6 Municipalities of Samtskhe-Javalheti Region</p>	<p>Samtskhe-Javakheti Regional Administration is responsible for coordination between the Central Government (<i>Cabinet of Ministers</i>), line ministries and agencies on one hand, and local municipal authorities on other hand. Head of the Regional Administration is appointed and directly reports to the Prime-Minister of Georgia. Involvement of Samtskhe-Javakheti Regional Administration in project planning will be of particular importance for the overall successful implementation of the project.</p> <p>Six municipalities of Samtskhe-Javakheti Region are independent, self-governing bodies which act on the basis of rights and responsibilities granted under the Local Self-Government Code of Georgia of 2014[1]. Head of each municipality is the Mayor who is elected through universal vote by all residents of the municipality. Legislative body of a municipality is elected Municipal Council (?<i>Sakrebolo?</i>), while executive functions are performed by the Municipal Administration.</p> <p>Amongst other municipal services that are being provided, functions of the municipalities that are relevant to this project include the development and implementation of projects (<i>including agricultural and environmental projects</i>) of local importance. Six municipalities of Samtskhe-Javakheti Region will be main partners and key decision makers in all stages of the project development.</p>	<p>Components 1, 2 and 3</p>
<p>Ministry of Finance (MoF)</p>	<p>MoF is responsible for public finance, fiscal and budgetary management (<i>incl. allocation of state transfers from state budget to local-self-government /municipalities/ budgets</i>). MoF is central body in charge of budgetary planning at national level. MoF will contribute by providing recommendations and suggestions for financing of innovations especially regarding agrobiodiversity based agrotourism.</p>	<p>Component 2</p>
<p>Other regions and municipalities of Georgia</p>	<p>Representatives of other regions of Georgia rich in agrobiodiversity and known also as vine and wheat producers will be invited to participate in stakeholder engagement workshops in order to get their feedback for the design of the project activities. The project will also ensure inclusion of the stakeholders from other regions and municipalities in the capacity development and knowledge management activities.</p>	<p>Component 1</p>
<p>Academic organizations</p>	<p>Representatives of educational and research institutions (<i>universities, research centers, laboratories etc.</i>) will be closely involved in both planning and implementation stages of the project.</p>	<p>Components 1, 2 and 3</p>

<p>Local NGOs and CSOs (e.g. women initiative groups)</p>	<p>Local NGOs/CSOs play a prominent role in informing public policy on agriculture, agrotourism and biodiversity. NGOs and CSOs will help to identify gaps and challenges related to the application of project approaches and most efficient mechanisms related to public participation in project related decision-making processes.</p> <p>Project will closely cooperate with Gender Commissions established by each 6 target municipalities under Georgia's <i>Gender Equality Act of 2010</i>[2]. Gender Commissions consist of Municipal Council members, Municipal Administration representatives and local NGO/CSO representatives.</p> <p>Main function of the Gender Commissions is to work on Gender equality annual action plans for respective municipalities.</p>	<p>Components 1, 2 and 3</p>
<p>NGO Elkana</p>	<p>The Biological Farming Association Elkana, a Georgian non-governmental organization, was founded in 1994. In parallel with promoting the development of organic farming, Elkana is also occupied with the problems of traditional agricultural diversity conservation (<i>In 2004-2009, Elkana implemented the GEF/UNDP-funded project 'Conservation and Sustainable Use of Georgia's Agrobiodiversity', in the framework of which old Georgian cereal and leguminous crops have been recovered and cultivated on farms, including ancient and endemic wheat varieties</i>) and sustainable use and rural tourism development. Initial activities of Elkana were limited to advisory services of farmers; at present the organization's scope of activity has widened. Elkana will be involved in planning stage and also in implementation stage of the project as potential partner organization (<i>sub-contractor</i>).</p>	<p>Components 1 and 2</p>

<p>Local Farmers and Private Sector Entities</p>	<p>Local farmers and private sector play an important role in supporting agriculture, agrobiodiversity and agrotourism. The private sector is a key recipient and beneficiary, not only contributing to upgrading existing and establishing new policies on agrobiodiversity, but also for facilitating innovative transfer and as knowledge and information multiplier.</p> <p>Local farmers and private sector entities will further participate in capacity development activities to obtain required knowledge and skills to identify and carry out such business opportunities.</p> <p>Also, local farmers and private sector will be engaged in the project through close consultations and direct implementation of <i>in-situ</i> conservation and sustainable use of agrobiodiversity through farmer management to improve livelihoods of local people, revitalize rural agrotourism and generate impacts necessary to advance progress at national level.</p>	<p>Components 1, 2 and 3</p>
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<https://matsne.gov.ge/en/document/view/91624>

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

Achieving gender equality on the way to building a the democratic state has always been challenging for Georgia. Although the Georgian government has made some

positive attempts to elaborate and implement a gender equality strategy and has adopted international obligations, there is an overall consensus that it must make a greater commitment to ensure gender equality and combat all kinds of discrimination against women. According to the National Statistics Office of Georgia share of women is more than 52% out of total population[1]. A reduction in agrobiodiversity places rural women in an increasingly vulnerable position, as they are majority of rural households and they are not empowered enough to improve their livelihoods and to have increased access to time-saving assets in technology and capital in order to reduce women's work and time burdens in agriculture. Studies have shown women in rural areas to have low-level access to rural finance, technologies, information and the decision-making[2]. Women also lack technical and professional expertise in agriculture with both vertical and horizontal segregation in employment, with more men in managerial positions and in technical subjects.

For Georgia, agriculture remains a priority sector in terms of GDP contribution and economic growth. Gender differences in the sector show that women are more involved in low-income activities than men, such as subsistence agriculture. Women are actively engaged in both plant and animal production, especially in family farming. However, many of these women are involved in unpaid and informal work, and their role remains invisible and unrecognized. Non-paid female workers were 69 percent of total non-paid workers. The participation of women in agricultural activities is lower than that of men. The role of women in rural and agricultural development is important. However, the often-overlooked contribution of rural women to agriculture is that their work in vain is largely associated with family responsibilities and remains unpaid and women employed in all sectors of agriculture have less pay than men. On average, Georgian women make up 75 percent of men's income.

Gender mainstreaming plan will be developed during the PPG phase, which will provide in-depth gender analysis aiming to empower women as well as men and working towards achieving gender equitable outcomes. The strategic document will reflect the following points while offering relevant activities:

- 1) Equal/appropriate participation or representation of women and men ? in decision-making as well as project implementation activities.
- 2) Women?s and men?s different needs based on their concerns, experiences (including with regards to their roles and responsibilities) and constraints.
- 3) Whether proposed activities/approaches will lead to gender-responsive results (and not unintendedly reinforce gender inequity).
- 4) Collection of gender-disaggregated data.

Gender mainstreaming plan will provide gender indicators and targets so they will be part of the monitoring. Additionally, there will be dedicated financial and human resources dedicated to the corresponding gender activities.

The project activities will contribute directly and indirectly towards improving the condition of women by enhancing their capacity to participate in decision-making processes, and to engage in project activities that have the potential to improve their economic situation. Women will benefit particularly from skill development (education/training) and improved access to knowledge on agrobiodiversity, which will contribute increasing both the incomes and social capital of women. A gender mainstreaming approach will be best undertaken towards integrated agrobiodiversity considerations into overall biodiversity, agriculture and agrotourism policies. Planning goals and their concrete application and implementation will be evaluated in terms of specific criteria and integrated into mediation and participation processes that will take into account the different needs of male and female populations. Expected gender study under the project will include gender-mainstreaming recommendations to ensure that gender considerations are properly taken into account with view of national gender equality legislation[3] and existing nationwide gender equality barriers and obstacles[4].

In addition, during the PPG phase, a specific budget will be allocated for gender related analyses, and wherever possible, gender-sensitive indicators and sex-disaggregated data, as well as gender mainstreaming specific activities will be included in the project's action, monitoring and evaluation plans.

[1] GeoStat (2021): <https://www.geostat.ge/en/modules/categories/41/population>

[2] FAO (2018). Gender, Agriculture and Rural Development in Georgia:
<http://www.fao.org/3/ca0577en/CA0577EN.pdf>

[3] **Gender Equality Act (2010)** // Law of Georgia on Gender Equality of 26 March, 2010 (*Official Gazette of Georgia ? Legislative Herald of Georgia (LHG)*, web-page: matsne.gov.ge, Ref.: 2844-Is, Registration Code No. 010.100.000.05.001.003.962/ Consolidated Version as of 19.02.2019 as modified by 8 amending Laws) - [Unofficial Translation in English]

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[4] Gender Equality in Georgia: Barriers and Recommendations (2018). Parliament of Georgia.

http://www.ge.undp.org/content/georgia/en/home/library/democratic_governance/gender-equality-in-georgia.html

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources;

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women.

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

For agrobiodiversity-based agriculture and agrotourism businesses, the private sector is a key recipient and beneficiary, not only contributing to upgrading existing and establishing new approaches, but also for facilitating technology transfer and as knowledge and information multiplier. Project PPG phase will be carried out in consultation with individual farmers, farmer associations, small business representatives, vine and wheat producers and local wine and bakery industry sector representatives, local tourism sector representatives and other stakeholders. A key component of the project strategy will be extensive analyses of market demand for agrobiodiversity-based products and services within the project area - in Samtskhe-Javakheti Region. Private sector will be engaged in the project through consultations during the project planning and implementation processes. Private sector can play an important role in terms of investments mobilization potential. Also, private sector representatives will participate in capacity development activities to obtain required knowledge and skills to identify and carry out best and environmentally friendly business opportunities.

5. Risks to Achieving Project Objectives

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

Table 6 below indicates potential social and environmental risks that might prevent the project objective from being achieved or may be resulting from project implementation, and mitigation measures that address these risks to be further developed during the project design.

Table 6. Risks and Mitigation Measures

Risks	Rating	Mitigation Measures
Lack of governmental and municipal co-financing to invest in sustainable management of agrobiodiversity	Medium	This risk is rated as medium due to the fact that the central government of Georgia always transfers funds according to the approved budget. The mitigation measure for this risk is to firstly ensure strong level of communication with the central government and municipal authorities during all phases and ensure reflection of the committed funds in the central and municipal budgets.
Lack of interest of local authorities, farmers and communities in agrobiodiversity and agrotourism	Low	<p>For recent years Georgia has become international tourist hub destination. Local authorities, farmers and communities are less likely to want not to explore new marketing and business opportunities. An increased emphasis on tourism will mean that there is a very low risk that there will be a lack of local interest in agrobiodiversity and agri-business.</p> <p>This risk could be mitigated through public awareness campaigns (respective short snapshots will be prepared and broadcasted in the municipalities of Samtskhe-Javakheti Region) to be implemented from the early stage of project implementation. In addition to this the project will work closely with the MEPA, MESD and MRDI, agriculture and tourism related governmental agencies and international organizations to consider possibility to jointly organize agrobiodiversity promotion events.</p>

Low political priority	Low	Clearly defined work scope and performance monitoring by the project will mitigate the risk and create motivation for good performance of partner institutions. Also, the project proposal includes capacity building and awareness raising measures designed to create the necessary motivation.
Risks related to novel Covid-19 pandemic and post-pandemic restrictions	<p>High (<i>in short term period</i>)</p> <p>Medium/Low (<i>in medium- and long-term periods</i>)</p>	<p>In medium- and long-term perspectives these risks will be mitigated through taking into account existing regulations and respond equally to the specific needs of women, children, disabled and other vulnerable groups. In addition, national and international public health safety standards and necessary measures regarding pandemic and post-pandemic prevention and avoidance of novel Covid-19 and other communicable diseases will be considered as well.</p> <p>Opportunity analysis: the COVID-19 crisis can provide opportunities to showcase the project's successes if its impact is successfully bundled with public health benefits. Project activities will include stakeholder engagement at the PPG and the implementation phases. In case in-person meetings are allowed, public health requirements will be followed. In cases when in-person meetings are not possible, online tools will be used to organize meetings. To reduce data transfer traffic, documents and presentations will be shared with participants before the meetings.</p>

Climate change impacts	Medium/Low (in medium-term period)	<p><i>Assessment of climate change:</i> Based on the assessment of current changes in climate on the basis of existing statistical data (1955-2005), there is a trend in increase of both mean annual air temperature and annual precipitation in Samtskhe-Javakheti region. At the same time, air temperature absolute minima and absolute maxima were examined. The analysis indicates a warming trend in this region both in winter and summer seasons.</p> <p><i>Hazard Assessment:</i> The predicted changes in climate elements to the end of the current century are considered to produce an impact on water resources, ecosystems, and the economy of the region. In the seasonal distribution of run-off, a significant decrease (by 41%) was derived for summer, with a moderate increase (by 11%) in spring, allowing the anticipation of some decline in the intensity of summer floods.</p> <p><i>The increase in the frequency of disastrous events:</i> heavy precipitation, floods and landslides, will negatively affect the low-efficiency agricultural development of the region, which may increase migration from rural areas to city centers. The projected trends of climate change for the region, if they come about, may presumably further increase the vulnerability of agricultural and natural ecosystems.</p> <p><i>Plans for mitigation:</i> During the project implementation, capacities of 6 municipalities will be strengthened to deal with extreme climate events in general. The project will also build capacity on climate risk assessment and mitigation in agriculture through training workshops. Project interventions will consider climate risks, and plans will include preventive measures against extreme events. The sustainable agrobiodiversity management concept will be considered during the implementation and feasibility studies will consider resilience while assessing the agrotechnical options.</p> <p>Although the climate change risk is considered medium/low for the Project, a detailed evaluation of climate change risks and risk management options will be conducted during the PPG phase.</p>
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6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

At PIF stage, the Regional Environmental Centre for the Caucasus (REC Caucasus) has been designated by the Recipient Government (Ministry of Environmental Protection and Agriculture of Georgia - MEPA) as the Project Executing Agency. UNEP will be the GEF Implementing Agency (IA) for the project. A task manager will be appointed to oversee the implementation of the project, assisted by a support staff. The Ministry of Environmental Protection and Agriculture of Georgia (MEPA) will be the beneficiary of the project. REC Caucasus, with technical competence and administrative preparedness for entering into delivery-based contracts, will serve as the project Executing Agency (EA).

A Project Steering Committee (PSC) will be established by the MEPA and chaired by the representative of the MEPA. REC Caucasus will perform tasks of secretariat for the PSC. Along with the representatives of the MEPA, the PSC will be comprised of the representatives from relevant line ministries and agencies, regional administrations of Samtskhe-Javakheti Region and relevant 6 municipalities and other stakeholders. The PSC will hold meetings at least twice a year, but additional meetings can be held if necessary. The PSC should make necessary decisions/recommendations in accordance with the rules and regulations of UN Environment and the GEF.

The project will ensure good coordination with on-going GEF-financed and non-GEF initiatives being implemented by UN Environment and by other GEF international agencies. When appropriate, the project will also liaise closely with GEF-funded projects under the GEF-7 Biodiversity Focal Area Strategy to learn from and use similar methodologies and indicators as they evolve, including methodologies and indicators under program priorities: I. Mainstream biodiversity across sectors as well as landscapes and seascapes; and III. Further develop biodiversity policy and institutional framework.

At the same time, a number of ongoing projects and initiatives in Georgia contribute to the project outcomes and outputs. Opportunities for collaboration and alignment with the following projects and strategies will be explored at PPG phase.

Currently, the Regional Environmental Centre for Caucasus (RECC) is executing the UNEP implemented GEF funded projects: ?Applying Landscape and Sustainable Land Management (L-SLM) for mitigating land degradation and contributing to poverty reduction in rural areas?; ?Generating economic and environmental benefits from sustainable land management for vulnerable

rural communities of Georgia? (Activities under Components 2 and 3 of the proposed project will be designed based on the results of these ongoing project); and ?Georgia?s Integrated Transparency Framework for Implementation of the Paris Agreement?.

GEF funded regional project for the South Caucasus countries ?Upscaling of Global Forest Watch in Caucasus Region? implemented by the UN Environment and executed by the World Resources Institute aims at empowering decision-makers in government, the private sector, and civil society with technology and information necessary to reduce deforestation and land degradation and conserve biodiversity in Georgia, Armenia and Azerbaijan. Potential collaboration options with this project will be discussed at PPG stage. In addition, regular information exchange and coordination will be ensured with other related initiatives managed by municipal authorities and/or initiatives funded by other donors.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions?

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

The project components are aligned to number of national strategies, plans and conventions related to agrobiodiversity showing the sector development pathway.

Georgia?s Second National Biodiversity Strategy and Action Plan - NBSAP (2014-2020) aims at protection and rehabilitation of unique eco-systems, diversity of species and genetic resources of Georgia through sustainable use and management of biological resources and an equitable distribution of the benefits[1].

Agricultural and Rural Development Strategy of Georgia (2021-2027) and Georgia?s Agricultural and Rural Development Strategy?s Action Plan (2021-2023): The project is in line with newly adopted Strategy and Action Plan and contributes to their implementation.

In 2019, Government of Georgia approved **National Document for Sustainable Development Goals (2020-2030)**. The document depicts the priorities of UN SDGs at national level, aimed at promoting the implementation of SDGs and introducing evidence based national policy according to the 2030 agenda. The process of nationalization of goals was commenced in 2015. Following long consultations,

considering the challenges and the national context of the country, internal priorities of the UN SDGs have been determined and a number of targets have been adjusted to Georgia. Given the comprehensive nature of the document, the achievement of each sector-specific target is prescribed in time and baseline (2015 data) and target indicators (for 2030) are established. The mentioned approach is a unique possibility for measuring progress and evaluating the achievement of goal, which is extremely important for planning sector specific policy supported by evidences and information. The project will build the locally relevant knowledge base and capacities of planners to integrate projections in agrobiodiversity policies and strategies in alignment with SDG relevant national targets to be achieved in Georgia by 2030 (*for more details see Annex D. Theory of Change*).

EU-Georgia Association Agreement: Association with the European Union is the cornerstone of Georgia's foreign and internal policy. Under the EU-Georgia Association Agreement, Georgia recognizes the importance of ensuring the conservation and the sustainable management of natural resources to contribute to Georgia's economic, environmental and social objectives.

In 2016, Georgia joined the **Land Degradation Neutrality Target Setting Programme (LDN-TSP)**, committing to establish national voluntary targets for LDN and identifying transformative projects to achieve these targets. The proposed project will provide support to the Georgian government in fulfilling the LDN national targets.

The project will contribute to the implementation of regional development goals under **Samtskhe-Javakheti Regional Development Strategy (2014-2021)**.

In December 2018 Georgia joined the **International Treaty on Plant Genetic Resources Important for Food and Agriculture (ITPGRFA)**. Convention aims at the conservation and sustainable use of all plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity (CBD), for sustainable agriculture and food security.

[1] Currently preparation for development of Georgia's Third National Biodiversity Strategy and Action Plan - NBSAP (2021-2027) is underway.

8. Knowledge Management

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

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

The proposed project will build upon and collaborate with the ongoing projects and initiatives already mentioned in Section 6 above. Component 3 of the project will involve existing experience to support effective knowledge management related to biodiversity (incl. agrobiodiversity) management. Lessons learned on best practices and integrated models of project planning and implementation during training and public awareness activities, and reports will be elaborated and sent out with the conclusions and suggestions to relevant authorities and institutions. Web-based instruments will be developed to communicate and promote project outputs and deliverables. In addition, this project will link with other countries? GEF financed agrobiodiversity-related projects and will exchange with countries participating in this project.

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9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approva I	MTR	TE
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Medium/Moderate

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

Supporting Documents

Upload available ESS supporting documents.

Title

Submitted

SRIF_Georgia_agrobiodiversity_updated

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 with this template).

Name	Position	Ministry	Date
Ms. Nino TKHILAV A	GEF OPERATIONAL FOCAL POINT	MINISTRY OF ENVIRONMENTAL PROTECTION AND AGRICULTURE OF GEORGIA	10/27/2020

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

PROGRAM/PROJECT MAP AND GEOGRAPHIC COORDINATES

(Source: www.mapcoordinates.net/en)

