TERMS OF REFERENCE

Project Title:	Generating Economic and Environmental Benefits from Sustainable Land Management for Vulnerable Rural Communities of Georgia
Executing Agency:	The Regional Environmental Centre for the Caucasus (REC Caucasus)
Implementing Agency:	United Nations Environment Programme (UN Environment)
Organisational Unit:	Sustainable Management of Natural Resources
Post Title:	Market Analysis and Branding Expert
Contract type:	Service Agreement
Starting Date:	29 July, 2018
Duration:	11 months (July 29 – June 18, 201)
Duty Station:	Tbilisi, Georgia

1. PROJECT BACKGROUND

Land resources are the foundation for food security, sustainable livelihoods and economic growth in Georgia. Georgia has shown clear drive to combat land degradation and improve land management systems by moving forward with a number of baseline activities, including its accession and implementation of relevant international agreements and adoption of related policies and laws, including the NEAP, INDC, NBSAP, NAP of UNCCD, TNC of UNFCCC, a new agricultural strategy and a new national forest policy. To achieve the global vision of zero net loss of healthy and productive land, measures and action on the ground are needed. Georgia is one of 100 countries that committed to define national LDN targets and an implementation strategy. In a first step, land degradation hot spots and main degradation causes had been identified. Land degradation in Georgia can be characterized by the following aspects:

- Loss of natural vegetation and soil quality caused by overgrazing;
- Loss of agricultural productivity and soil due to inappropriate farming techniques;
- Reduction of area and quality of forests due to illegal extraction and inappropriate forest management;
- Loss of productive land due to urbanization and conversion into non-agricultural areas.

The process of setting up national targets and an implementation strategy for LDN in the frame of a so called ´National Target Setting Program´ (TSP) started in Georgia in 2016. Cross-sectoral meetings yielded in a set of national LDN targets, which were submitted to the UNCCD Secretary by the Ministry of Environment and Natural Resources Protection of Georgia in September 2017.

The solution to the barriers identified above is the development of new sustainable land management systems at both the commune and farmer plot level that integrate climate smart agricultural production, food security and resilience and thereby contribute to Georgia's objectives for Land Degradation Neutrality. The introduced management systems should lead to increasing levels of production and productivity while also maintaining the ecological integrity of the land; respect land and resource carrying capacities and also improve land and resource conditions; and be both integrated (encompassing agriculture, forestry, water and livestock management) and adaptive (structured to adapt to evolving challenges, including climate change). The above-mentioned factors underline the critical importance of promoting better coordination of sustainable land management across different sectors on the basis of solid data, of improving the country's existing policy and financing framework related to the management of land resources, and of strengthening the capacity and skills of national and local government institutions and other stakeholders to undertake SLM approaches, in order to overcome existing barriers to mainstreaming Landscape and Sustainable Land Management (L-SLM) activities.

The overall objective of the project is to develop and strengthen SLM practices and build capacity for their application for the protection of natural capital in Georgia.

Project Component:

1. Creating an enabling environment at municipal scale for achieving Land Degradation Neutrality (LDN) Country Voluntary target;
2. Pilot implementation of measures avoiding degradation, intensifying sustainable land management practices and land rehabilitation to improve ecosystem functions and services;
3. Knowledge Management and Capacity Building;

Outset situation

Desertification in eastern Georgia is accelerated by human activities, causing widespread severe erosion. Erosion and desertification have affected 300,000 ha of arable land and 700,000 ha of pasture land: the upland watershed ridges and most of the Kakheti ridge slope are overgrazed[1]. Due to the climate and the topography, natural soil erosion takes place also on quite a large scale in Kakheti and Shida Kartli region.

The proposed project will contribute to implementation of Kakheti and Shida Kartli[2] Regional Strategies and Agriculture Development Strategy of Georgia (2017-2020)[3]. Both strategies underline decreasing of soil fertility due to the improper land management as acute problem for agriculture development and poverty reduction in rural communities.

The particular pilot areas and intervention measures were selected according to the Georgia's National Action Program to Combat Desertification (NAPCD)[4] and the Georgia's Third National Communications to the UNFCCC[5]. Both policy documents define the municipalities of Kvareli, Sagarejo, Gori and Kareli as most vulnerable to Climate Change and land degradation. The four most vulnerable municipalities in this region have been defined according to values and coefficients of vulnerability indicators for Georgia[6]. The communities of these municipalities have a limited portfolio of assets, including technical know-how to enable them to address the challenges of land degradation. There is, therefore, a poverty-SLM nexus that needs urgent interventions to support the avoidance, arrest and reversing of land degradation in the municipalities of Kvareli, Sagarejo, Gori and Kareli.

Gori Municipality: Covering an area of 232,720 ha7, the municipality consists of 1% urban, 56% cropland-grassland mosaic and 43% forest area. The agricultural land is 61,902 ha8 (22,293 ha of arable lands, 11,000 ha of perennial plantations, 1,988 ha of hayfields, and pastures covering 27,621 ha). According to 2014 general census, the population of Gori municipality is 125,692 of which 60,744 are male, and 64,948 are female. 48,143 people live in the city and 77,549 in villages. The number of

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[1] Environmental Performance Review : Georgia2016 / Environmental Performance Reviews Series No. 43, Georgia - Third Review // The United Nations Economic Commission for Europe (ECE) Environmental Performance Review Programme / United Nations, New York and Geneva, 2016.
https://www.unece.org/fileadmin/DAM/env/epr/epr_studies/ECE_CEP_177.pdf

[2] Regional Development Strategy of ShidaKartli (*Khashuri, Kareli, Gori, Kaspi Municipalities*) Region 2014-2021 // Approved by the Government of Georgia- Ordinance #1364 of September 17, 2013. e
http://www.mrdi.gov.ge/sites/default/files/shida_qartli_regional_development_strategy_2014-2024_0.pdf

[3] Agriculture Development Strategy of Georgia 2015-2020 // Approved by the Government of Georgia - Ordinance #167 of February 11, 2015 / *see Share of Agriculture in GDP in Table 1: Sown Area, Livestock Numbers, and Share of Agriculture in GDP 1990-2013.*
http://www.moa.gov.ge/Ge/Public/Strategy/8

[4] Second National Action Program of Georgia to Combat Desertification 2014-2022 / Approved by the Government of Georgia- Decree #742 of December 29, 2014.
https://www.rec-caucasus.org/files/publications/pub_1481807666.pdf

[5] Third National Report of Georgia On the Implementation of the UN Convention to Combat Desertification (2006) / Ministry of Environment Protection and Natural Resources of Georgia, 2006.
http://archive.unccd.int/cop/reports/centraleu/national/2006/georgia-eng.pdf

[6] Assessment of Vulnerability Profile Indices for Georgia (2012) / by DrDarkoZnaor // Identification and Implementation of Adaption Response to Climate Change Impact for Conservation and Sustainable Use of Agro-biodiversity in Arid and Semi-arid Ecosystems of South Caucasus / Report was carried out with support from the REC Caucasus and was funded by European Commission under the "Environment and Sustainable Management of Natural Resources, Including Energy Programme", 2012.
https://www.rec-caucasus.org/files/publications/pub_1481807488.pdf

[7] Some northern territories of the Gori municipality are part of a self-proclaimed republic of South Ossetia (*currently under de-facto control of Russian Federation*) and have not been under control of the Georgian government since 2008.

[8] The agricultural land of *61,902* ha lays within an area of roughly 135,200 ha (*out of total232,720 ha*) of the Gori municipality that remains under direct control of the Georgian government.

households in the municipality is 38,284, of which 15,021 are in the city and 23,263 in villages. The main income of the 75% of the population is from agriculture. Important crops include wheat, barley, corn, and Lucerne. The horticultural sector is well developed in this municipality, with farmers grow apple, pear, peach, grapes.

In Gori municipality, 81,912 people's major income source is agriculture[9]. Arable land (14,790 ha) is the dominant agricultural land category followed by land under permanent crops (33.4%) and natural meadows and pastures (14.5%). Cereal (6,217), and maize (3,208 ha) are the major annual crops in Gori. A considerable area of arable land is used for cultivating vegetables (2,538 ha). 29.5% of the total arable land is uncultivated. Orchards (9,062 ha), and vineyards (255 ha) are major permanent crops in Gori. One of the main parameter supporting high land productivity under agricultural production is the provision of irrigation water.

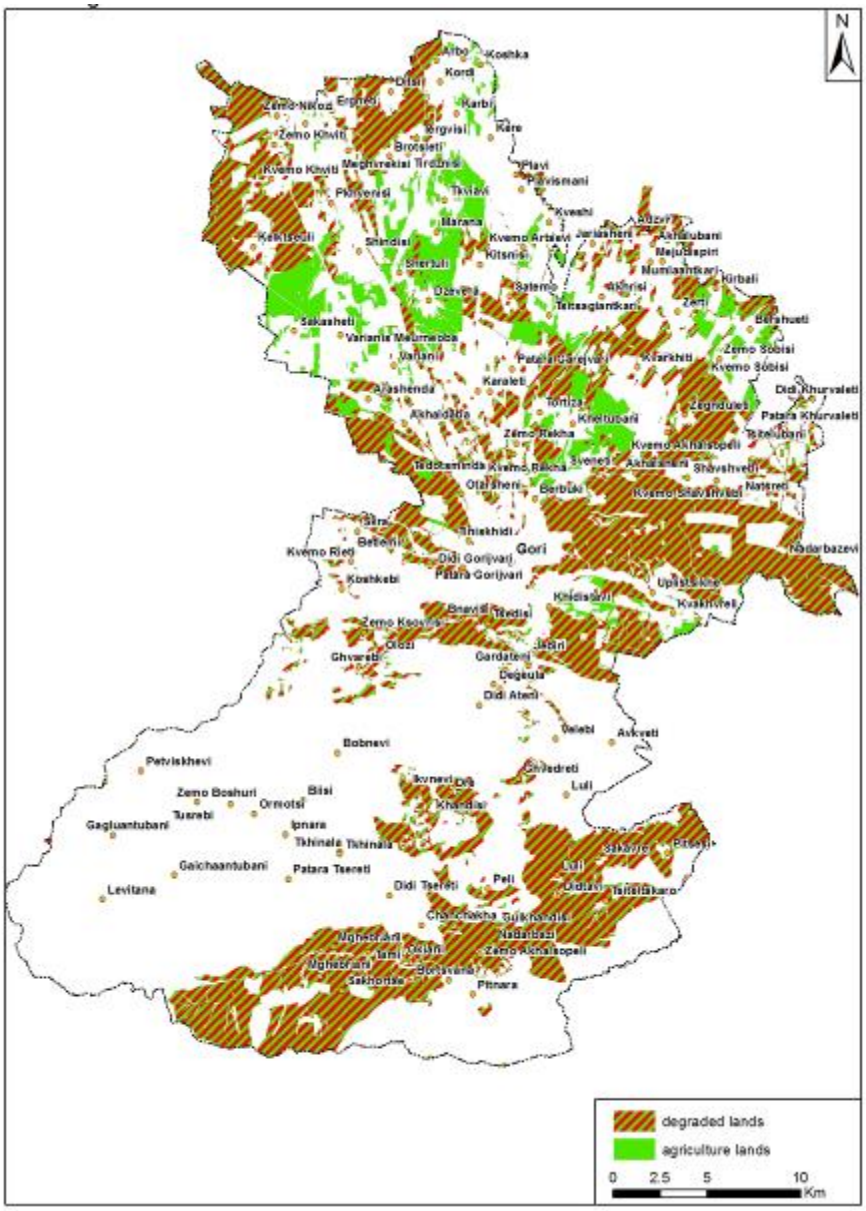
Animal husbandry is the second largest sub-sector of agriculture after plant production. Animal husbandry uses the considerable part of the agricultural land, especially pastures and haylands, but also require a substantial area of arable land for fodder production. In Gori beekeeping is an important field of agriculture as well accounting 4,596 beehives.

In Gori Municipality, key indicators of land degradation are listed below, and map 2 depicts land degradation patterns:

- Land productivity is severely reduced on approximately 20,000 ha agricultural land due to improper irrigation practices;
- About 1,000 ha of agricultural land is degraded due to man-made waterlogging;
- About 14,157 ha of Agricultural land is degraded because of water and wind erosion;
- 233 ha of agriculture land suffer from salinization.
- 30 years ago, 1,499 ha of the territory was covered by windbreaks, however, 80% has been lost.

[9] Census of Agriculture 2014 / National Statistics Office of Georgia (GEOSTAT) / 28.04.2016. http://census.ge/files/results/agriculture/AG%20Census%20Release_ENG.pdf

Map 2. Land Degradation in Gori Municipality



Kareli Municipality: The municipality is situated in the centre part of Shida Kartli and covers 111,000 ha10. Agricultural lands in Kareli Municipality cover 36,407 ha11, including 18,302 ha of arable lands, 4,678 ha of perennial plantations, 1,764 ha of hayfields and 11,762 ha of pastures. Forest area covers 26,746 ha. The population of Kareli municipality is 51,600, and the main economic activity of the municipality is horticulture. Agriculture provides 70% of the population's livelihood. Kareli is suffering from severe land degradation due to water and wind erosion (8,677 ha), and salinization (450 ha)12. 80% of windbreaks have been destroyed. Key crops include wheat, corn and barley. Horticulture plays an important role in the agriculture sector. Farmers grow apple, pear, and peach.

42,187 live in agricultural households (Agricultural Census of Georgia. GeoStat, 2014) in Kareli. These households are main force involved in agricultural production consisting of 12,516 household

[10]Some northern territories of the Kareli municipality are part of a self-proclaimed republic of South Ossetia (*currently under de-facto control of Russian Federation*) and have not been under control of the Georgian government since 2008.

[11]The agricultural land of 36,407 ha lays within an area of roughly 66,800 ha (*out of total 111,000 ha*) of the Kareli municipality that remains under direct control of the Georgian government.

[12] Regional Development Strategy of Shida Kartli (*Khashuri, Kareli, Gori, Kaspi Municipalities*) Region for 2014-2021 // Approved by the Government of Georgia - Ordinance #1364 of September 17, 2013. http://www.mrdi.gov.ge/sites/default/files/shida_qartli_regional_development_strategy_2014-2024_0.pdf

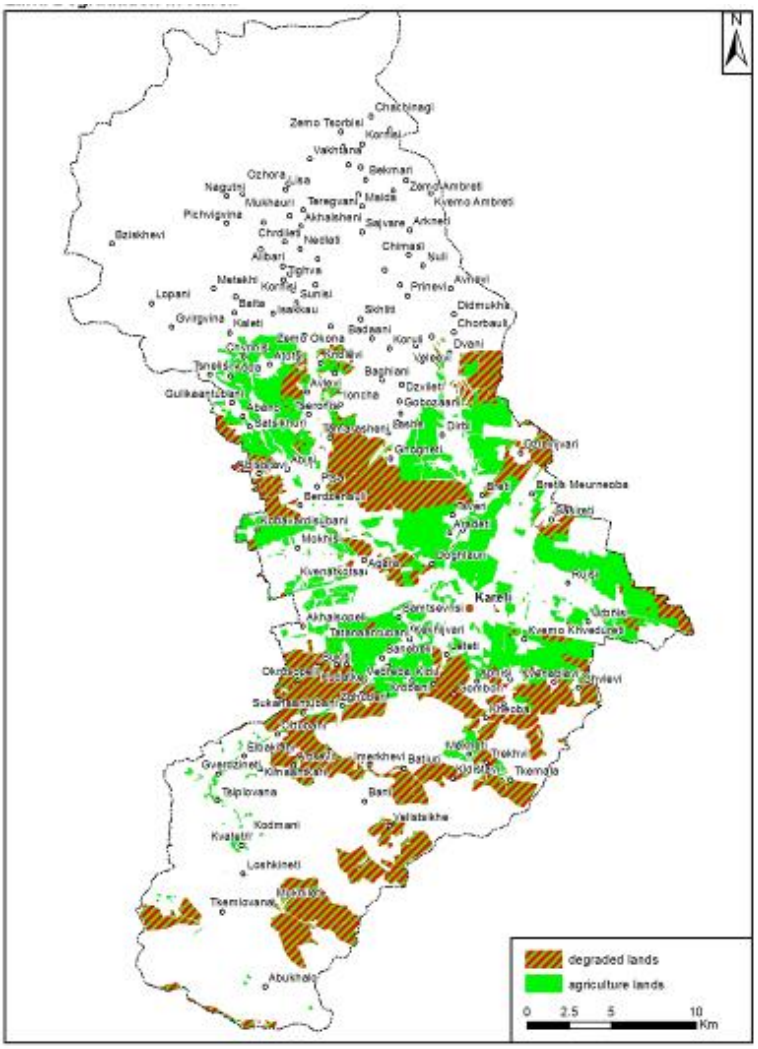
holdings, which make-up 99.7% of agricultural holdings (12,548). Arable land (12,386 ha) is the dominant land category operated by agricultural holdings (69.6%), followed by natural meadows and pastures (15.9%), land under permanent crops (14.5%) and greenhouses (0.006%). The total land operated by agricultural holdings under annual crops occupy 9,618 ha, from which grain cereals are sown on 4,979 ha dominated by barley. A considerable area of arable land is used for cultivation of vegetables (2,059 ha) and beans, peas, oats, etc. (1,678 ha). Uncultivated land equals to 22.3% of the total arable land. Currently, in Kareli municipality, 7.2% of agricultural land operated by agricultural holdings (1,297 ha) is in need of irrigation water, which severely impacts the production capacity of those lands.

Animal husbandry is the second field of agriculture after plant production in Kareli, which uses the considerable part of the agricultural land, especially pastures and hay lands, but also require a substantial area of arable land for fodder production. In Kareli beekeeping is an important field of agriculture as well accounting 2,569 beehives.

In Kareli Municipality:

- Land productivity is severely reduced on approximately 8,000 ha of agricultural land due to unsustainable irrigation practices;
- About 150 ha agricultural land is degraded due to waterlogging;
- About 8,677 ha of land is suffering from severe land degradation due to water and wind erosion, and 450 ha of land is salinized;
- 30 years ago, 601 ha of the territory was covered by windbreaks, similar to Gori, 80% has been destroyed.

Map 3. Land degradation in Kareli Municipality



Sagarejo Municipality: Covering an area of 155,369 ha, the municipality is situated in the western part of the Kakheti region. The major land covers are cropland-grassland mosaic (71%) and forests (29%). The municipality has a population of 59,400, and the main economic income of the municipality is agriculture. Rangeland sums to 56,884 ha, of which 40% is degraded due to overgrazing, 400 ha of arable land is degraded because of water and wind erosion and salinization, about 70% of windbreaks have been destroyed. Wheat, seed corn and sunflower are mainly sown in Sagarejo. Internal irrigation networks have fully collapsed, which adversely affect productivity and agricultural production. 34% of agriculture lands are privately owned, 61% of lands are state-owned, and 5% is the municipality property. The comparative lack of perennial plants in Sagarejo district is also reflected in the structure of existing orchards. Apples, and hazelnuts, which have significant revenue and export potential, are not grown in the region anymore.

In Sagarejo Municipality 6,094 ha from total agricultural land is private, 38,288 ha belongs to the state (source: municipality of Sagarejo). Homestead areas in total covers 1,430 ha, of which 889 ha is arable, 447 ha under perennial crops, hayfields – 10 ha, pasture – 84 ha. 53,039 people live in agricultural households in Sagarejo (Agricultural Census of Georgia. GeoStat, 2014). These households are the main workforce of the agricultural production. There are 13,549 household holdings, which make-up 99.3% of the total number of agricultural holdings (13,639). Natural meadows and pastures (40,766 ha) is the dominant land category (64.2%), followed by arable land (19,450 ha). 16.6 % of arable land (3,229 ha) is under permanent crops and, 0.005% (1 ha) greenhouses. Total land operated by agricultural holdings under annual crops is around 11,711 ha. Cereals (9,428 ha) are the dominant crops in Sagarejo. Sunflower (788 ha), vegetables (442 ha) and fodder crops (366 ha) are the next major annual crops. Total agricultural land under permanent crops consists of vineyards (3,025 ha) followed by orchards (184 h).

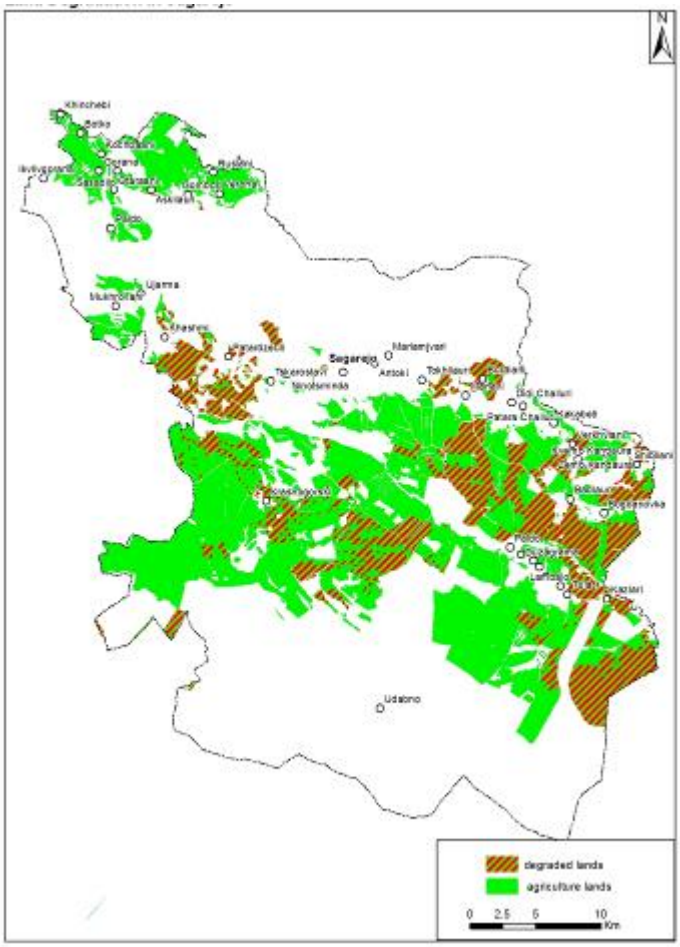
58% of agricultural land operated by agricultural holdings (9,355 ha) is in need of irrigation water, which severely impacts production capacity of those lands.

Animal husbandry is another field of agriculture in Sagarejo, which uses the biggest part of the agricultural land, especially pastures and haylands. Animal husbandry also requires a considerable amount of the arable area for fodder production. Beekeeping and honey production is also important agricultural production in Sagarejo.

In Sagarejo Municipality:

- On approximately 60% of agricultural land productivity is declined due to unsustainable irrigation practices;
- Up to 47,000 ha of lands have high salinity and sodicity issues;
- About 300 ha agricultural land is degraded due to waterlogging;
- 40% of pasturelands is degraded due to overgrazing;
- 30 years ago, 300 ha of the territory was covered by windbreaks, 70% has been destroyed.

Map 4. Land degradation in Sagarejo Municipality



Kvareli Municipality: Situated on the eastern border of Georgia, covering 96,500 ha, with 35% grassland-cropland mosaic and 65% forest area. The municipality is sparsely populated with 37,658 people. The municipality's land is severely degraded because of water erosion. Land degradation is affecting the community of Kvareli because 80% of the population depends on agriculture in the municipality. Agriculture is predominantly viticulture in Kvareli municipality. The old vineyards are very sparse, and their productivity is low (2-2.5 t/ha).

The number of population living in agricultural households is equal to 30,500 (Agricultural Census of Georgia. GeoStat, 2014) in Kvareli Municipality. These households are the main workforce of agricultural production. Total land operated by agricultural holdings under annual crops occupy 7,005 ha. Cereal production (5,420 ha) is the major annual crop. Total agricultural land under permanent crops consists of vineyards (4,502 ha), followed by orchards (1,635 ha) and berries (64 ha). Only 5 ha of land is occupied

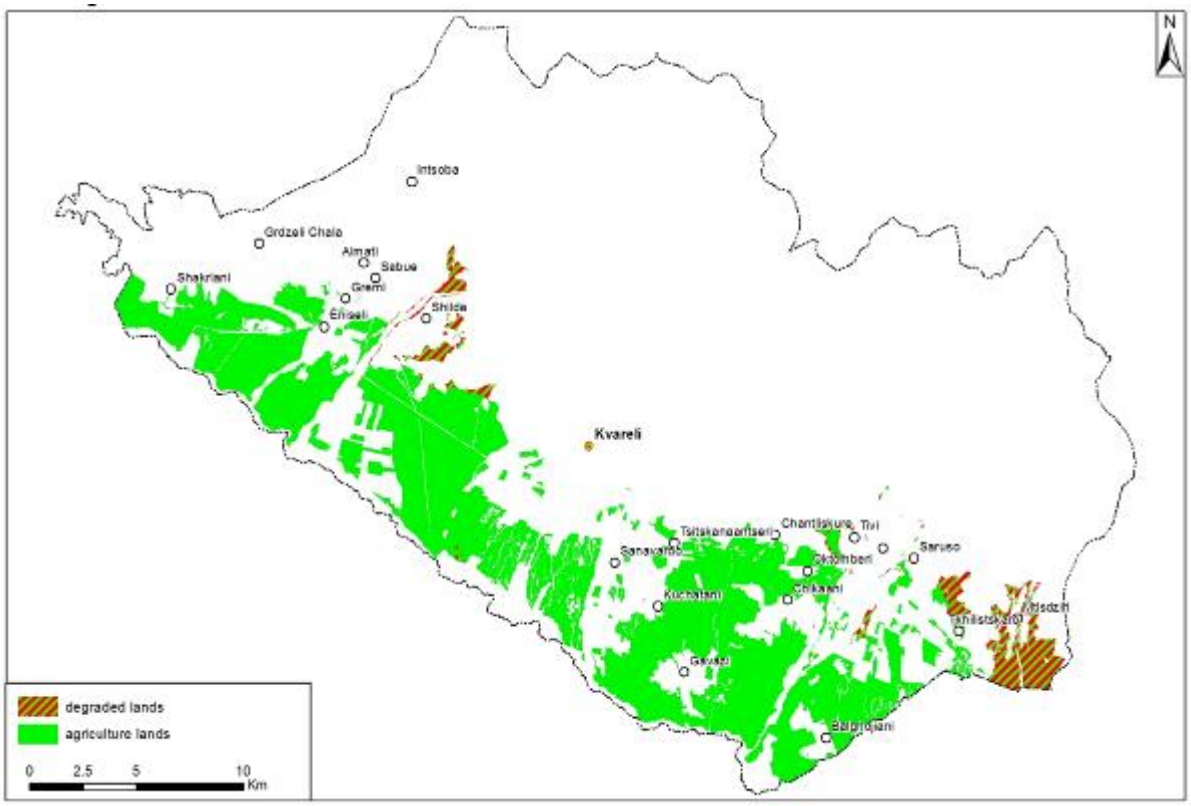
by nurseries of perennial crops. Currently, nearly half of the holdings (4,525 ha agricultural land) are in need of irrigation water.

Animal husbandry is the second major field of agriculture, which use considerable agricultural land, especially pastures and hay-lands, but also require arable land for fodder production. Kvareli municipality leads in beekeeping and honey production in Georgia with 11,078 beehives.

In Kvareli Municipality:

- Approximately 500 ha agricultural land is degraded due to waterlogging;
- Up to 10,000 ha of pastures and meadows are degraded due to overgrazing;
- About 1,000 ha of arable land is degraded due to impoverishment/depletion of soils.
- 60 ha of windbreaks has been left, whereas 300 ha of the territory was covered by windbreaks 30 years ago.

Map 5. Land degradation in Kvareli Municipality



2. SCOPE OF ASSIGNMENT

Specific Objective of the Assignment

The Market Analysis and Branding Expert will be appointed by the RECC and under the supervision of the Project Technical advisor, the specific objectives of the assignment are as follows:

- Identifying all the actors involved in the value chain(at least two value chains per each municipality) , analyzing their linkages, role, and added value;
- Identifying which elements of the chain(at least two value chains per each municipality) could/should be strengthened for developing strong linkages between production and market actors and for the producers to be able to capture larger share of the gross margins;
- Describing bottlenecks, barriers or obstacles to overcome.

The expert is expected to produce four separate reports in English or Georgian language on:

1. Value chain(at least two value chains per each municipality) analysis of Sustainable Agricultural Products for Municipalities of Gori, Kareli, Kvareli and Gori;
2. Local branding opportunities for sustainable agricultural products in 4 pilot municipalities;
3. Recommendations for suppling of environmentally friendly packaging materials and labelling of at least 16 farms for promoting sustainable agricultural practices and increasing awareness of consumers;
4. Concept for organization of sustainable agricultural exhibition fair in Tbilisi – with the involvement of farmers from pilot municipalities.

Main duties and responsibilities

- *Develop Agronomic production profile for Value chain(at least two value chains per each municipality) analysis of Agricultural Products for Municipalities of Gori, Kareli, Kvareli and Gori*: I. Identifying the currently dominant agronomic production practices for Agronomic production in the target municipalities; ii. Specification of agricultural management practices of soil & water management, pest & pesticide management, practices of land management and land use. The expert is required to pay particular attention to the sustainable agronomic production used as opposed to Agronomic production mostly required by the output market as well as to the farming techniques required to achieve market standards.
- *Product and market analysis:* ii. Demand for value chain(at least two value chains per each municipality) of sustainable agricultural production, investigate the current and potential demand of the final outputs, their various market destinations and related price trends so as to allow analysts to identify constraints, barriers and opportunities. Describe the most important constraints in front of quality improvements to meet minimum standards.
- Value chain(at least two value chains per each municipality) mapping and analysis : iii. Mapping the value chain(at least two value chains per each municipality) : Identify the main actors and other stakeholders (supporters and influencer)and how are they linked and interact in the value chain(at least two value chains per each municipality) ; assessing the flow of products, information and financial resources along the value chain(at least two value chains per each municipality) s–both descriptive and as a value chain(at least two value chains per each municipality) map. iv. Functional analysis of the value chain(at least two value chains per each municipality) . Describing the factors affecting the value chain(at least two value chains per each municipality) actors. v. Analysis of input and output markets. Examine the input and output market and their structure. Procurement processes, accessibility to and availability of varieties required as well as related standards and information. Identification of final buyer for output market, type of trade arrangements, transportation and related costs involved. Analyze degree of competitiveness, the existence of monopolies, monopsonies, oligopolies, market share and market segmentation for both input and output markets; and identification of potential lead firms for each value chain(at least two value chains per each municipality) .
- Policy environment & institutional analysis: Analysis of the institutional set-up: identifying andappraising the set of the formal and/or informal rules governing sustainable agricultural production. Specification of services provided to producers by government if any. Specification of services and service conditions provided to producers by input providers, traders, banking institutions, commercial extension providers etc. Provide recommendations for improvements of legal and institutional set-up for sustainable agricultural production.

- SWOT Summary of SWOT(strengths, weaknesses, opportunities, and threats) analysis of the chain(at least two value chains per each municipality) derived from the different aspects analyzed above.

Report tentative outline

The report outline for each value chain(at least two value chains per each municipality) should contain at least the following parts:

- Executive summary
- The socio-economic context of the value chain(at least two value chains per each municipality) and an overview of the chain(at least two value chains per each municipality) sub-sector development
- Research methodology utilized
- Findings from value chain(at least two value chains per each municipality) analysis covering the aspects with the following sections:
    I. Agronomic production profile
    II. Analysis of national and international market and demand for value chain(at least two value chains per each municipality) outputs
    III. Value chain(at least two value chains per each municipality) mapping: analyze and map the relations between actors and stakeholders including actors and their functions, supporters and their functions, service providers and their functions, flow of products along the chain(at least two value chains per each municipality) s (types and volumes) and flow of information as well as flow of finance.
    IV. Functional analysis of the value chain(at least two value chains per each municipality) and skills/technologies used in the chain(at least two value chains per each municipality) , as well as of constraints to quality improvements in the chain(at least two value chains per each municipality) .
    V. Economic analysis of the value chain(at least two value chains per each municipality)
    VI. Analysis and recommendations for improvements of the policy & institutional environment;
- Summary of SWOT analysis for each value chain(at least two value chains per each municipality)
- Proposed strategies and action plans for supporting in upgrading the value chain(at least two value chains per each municipality)
- Appendices (list of interviewed informants, socio-economic information and analysis, questionnaires, maps of studied areas, etc.).

Suggested methodology

Desk review

A research on the supply and demand side of sustainable agricultural products' domestic market. Collect all relevant studies, materials, and statistics already produced by relevant government agencies and other donors, NGOs and/or research institutes in the recent past, and detail the outcomes of these studies, as a starting point to map the value chain(at least two value chains per each municipality) and to reveal the main constraints and opportunities. A list of references and materials necessary for this assignment will be provided by RECC.

Primary data collection

Primary data collection in the field is undertaken by the expert to conduct the fieldwork to collect missing data, assess the specific situation and engage with potential stakeholders and key informants for the collection of their views.

The fieldwork activities

- Identification of the key chain (at least two value chains per each municipality) actors;
- Interviews them where possible;
- Interviews with the target companies (exporters/lead firms); assessing demand for value chain(at least two value chains per each municipality) outputs and what the constraints in their exporting business are;
- Interviews with importers in order to have a clear understanding about (sustainable) demand;
- Interviews with other chain(at least two value chains per each municipality) stakeholders such as input providers such as state agencies, financial institutions, universities, consulting and donor organizations;
- Field survey to quantify/collect statistics on number of chain(at least two value chains per each municipality) actors, prices, current exports, employment, market trends, sustainability standards etc.
- Technical consultation workshops with value chain(at least two value chains per each municipality) stakeholders to validate research findings.

Data processing and reporting

Field information and data will be analyzed by the expert in order to produce first draft reports for the at least two value chain(at least two value chains per each municipality) s per each municipality.

A national workshop will be organized by RECC where the expert will present their findings and proposed strategies and action plans for supporting in upgrading the value chain(at least two value chains per each municipality) s for comments from invited participants including representatives from value chain(at least two value chains per each municipality) local and national stakeholders, research institutions, FAO and UNDP.

The final reports will be produced taking into account the feedback from the consultation workshop.

3. DELIVERABLES

Time schedule of main deliverables:

N	Deliverables	Date
1.	Value chain (at least two value chains per each municipality) analysis of Sustainable Agricultural Products for Municipalities of Gori, Kareli, Kvareli and Gori;	25.11.2019
2.	Local branding opportunities for sustainable agricultural products in 4 pilot municipalities;	25.12.2019
3	Recommendations for suppling of environmentally friendly packaging materials and labelling of at least 16 farms for promoting sustainable agricultural practices and increasing awareness of consumers.	20.04.2020
4	Concept for organization of sustainable agricultural exhibition fair in Tbilisi – with the involvement of farmers from pilot municipalities.	18.05.2020

Profile:

A relevant post-graduate degree at or above the Masters level in natural resource management, climate change adaptation, agriculture, forestry, environmental management, or a related discipline. A minimum of five years of senior-level experience in economy, economic assessments and sustainable agriculture, including branding, preferably in the agricultural sector.

Skills:

- Solid understanding of economics and agro market;
- Experience working on natural resource management projects with particular reference to projects focused on the sustainable land management approach to addressing the impacts of land degradation an asset;
- Experience in appraisal of project log-frame indicators and participatory techniques;
- Experience in project development, implementation and management;
- Experience working with rural communities, and using participatory techniques to assess their needs and desires with regards to sustainable land management;
- Proven skills in data analysis and statistics;
- Understanding of donor-funded international program and projects
- Good communication and computer skills