THE REGIONAL ENVIRONMENTAL CENTRE FOR THE CAUCASUS

Terms of Reference
Procurement of Services of Technical Assistance
of an International Consultant
for Development of Pastureland related Methodologies
in Georgia

Publication Reference Number: **027RECC/G/FAO-12-2021**

Contract Title:	**Consultancy Service Contract for Development of Pastureland related Methodologies in Georgia**
Contract Type:	Fee-based
Contracting Organization:	The Regional Environmental Centre for the Caucasus (RECC)
Division/Department:	RECC Projects' Implementation Unit
Programme/Project Number:	**"Achieving Land Degradation Neutrality Targets of Georgia through Restoration and Sustainable Management of Degraded Pasturelands"** *(GEF Project ID: 10151 / FAO Entity Number: 654524 / FAO Project Symbol: GCP/GEO/006/GFF)*
Duty Station:	Home-based
Expected Start Date of Assignment: February 15, 2021 **Duration:** 10 months (up to 15 November 2021)	
Estimated Number of Working Days: 40 Working Days	
Reports to: Sophiko Akhobadze	RECC Executive Director

1. DESCRIPTION OF OBJECTIVES OF THE ASSIGNEMENT

1.1. Background

The Regional Environmental Centre for the Caucasus (RECC) as operational partner is involved in implementation of the Global Environmental Facility **(**GEF) financed project Achieving Land Degradation Neutrality Targets of Georgia through Restoration and Sustainable Management of Degraded Pasturelands – GEF Project ID: 10151" ("the Project") [1]. GEF Implementing Agency for the Project is the Food and Agriculture Organization of the United Nations (FAO).

With the above regard, in May, 2020 the RECC and FAO signed Operational Partners Agreement (OPA) for implementation of the Grant Project "Achieving Land Degradation Neutrality Targets of Georgia through Restoration and Sustainable Management of Degraded Pasturelands". This Agreement governs the implementation by the RECC of the relevant parts of the Project as defined in the results matrix, work plan and budget in Annex 3 of the OPA. It describes the relationship between the RECC and FAO and their responsibilities.

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[1] Project "Achieving Land Degradation Neutrality Targets of Georgia through Restoration and Sustainable Management of Degraded Pasturelands (2020-2023)" - (*GEF Project ID. : 10151, Focal Area: Land Degradation, GEF Period: GEF-7, Approved for Implementation: Feb-2020*). *https://www.thegef.org/project/achieving-land-degradation-neutrality-targets-georgia-through-restoration-and-sustainable*

Under the Project and within the context of Land Degradation Neutrality (LDN), Georgia aims to maintain and increase the amount of healthy and productive land resources in line with the national sustainable development goals. Georgia has released five voluntary LDN targets. The project is directly linked to the implementation of two of these targets: Target 1: Integrate LDN principles into national policies, strategies and planning documents; and Target 4: Degraded land will be rehabilitated.

Project consists of four subsequent components: (1) Policy and Regulatory/Institutional, (2) Demonstration, (3) Capacity Building and (4) Knowledge Management.

Component 2 (Demonstration of sustainable pastureland management practices and scaling up successful approaches) interventions will be designed according to land type (and tenure) and involve a variety of appropriate approaches to avoid, reduce, and reserve land degradation. The three target municipalities (Kazbegi, Dmanisi and Gurjaani) represent national priorities according to the sub-national assessments of hot spots (identified through LDN Target Setting Programme - TSP). Measures will also be applied to manage the tradeoffs. The LDN TSP will continue serving as guidance also during the PPG when the details on the project sites and project activities are elaborated. Component 2 activities will be closely linked to the capacity building carried out under Component 3.

The project sets out to support the national efforts to implement LDN targets of Georgia through restoration and sustainable management of the degraded pasturelands. It follows the STAP (GEF) guidelines "Scientific Conceptual Framework for Land Degradation Neutrality" and takes a phased approach. First, the country has selected three target municipalities based on the priorities of the LDN TSP, and the target landscapes for implementation activities. The target municipalities are located in the Eastern part of Georgia and include Kazbegi, Gurjaani, and Dmanisi. The target municipalities and landscapes have been characterized by key bio-physical and socio-economic parameters to set the project baseline in line with the voluntary LDN indicators.

The experiences of this project will be replicated across Georgia through activities of national and international partners, and shared with other countries in the region and at UNCCD.

1.2. General objective of the assignment

International Consultant for Development of Pastureland related Methodologies in Georgia (**International Consultant**) provides consultancy services of technical assistance for development of pastureland related methodologies concerning RECC's relevant Project parts under the OPA.

He/She will work under the overall guidance and supervision of the RECC Executive Director (Project Policy and Institutional Advisor – *RECC Project Core Team Supervisor/Manager*), the Project Technical Advisor in Agricultural Development (*RECC Project Core Team Coordinator*) and under the technical guidance of the FAO Project Coordinator (PC) in close consultation with the government designated National Project Director (NPD) representing the Ministry of Environmental Protection and Agriculture of Georgia (MEPA).

2. SCOPE OF THE ASSIGNMENT

2.1. Specific Task

- Specific task 1 of the assignment is development and support of the following activities of Output 2.1.1 (*A detailed inventory and multi-factor assessments of pastures are conducted in the three target municipalities of Kazbegi, Dmanisi and Gurjaani*) of the Project:

    Activity 1: Pasture inventory methodology with quantitative and qualitative parameters (*hereinafter referred to as "**Pasture Inventory Methodology**"*) is agreed through the coordination mechanism and developed with view of agreed national needs and requirements and based on LDN, Collect Earth, LADA and PRAGA approaches, outlining the materials and human resources available for pasture management development and identifying the gaps and/or investment opportunities.

    Activity 2: Nationally appropriate grazing monitoring and Decision Support System (DSS) methodology (*hereinafter referred to as "**Grazing Capacity Methodology**"*) is developed providing contextually data collection and decision making built on economic, environmental and social indicators that rely on transparent, well documented indicators d .

- Specific task 2 of the assignment is the assignment is development and support of the following activities:

    Activity 1: elaboration of a methodology for development of municipal pastureland management strategic and operational plans (*hereinafter referred to as "**Methodology for Development of a Municipal Pastureland Management Plan**"*) and LDN framework principals for Monitoring and Evaluation of the implementation of the Pastureland Management Plans, in accordance to the Grazing Capacity Methodology , indications

    Activity 2: Development of recommendations and roadmap for introduction of improved silvopastoral practices and systems on the target pastures and

    Activity 3: Technical training of trainers and knowledge sharing on LDN oriented sustainable pastureland management.

2.2. Planed Activities under the Assignment

The following phases are envisaged to be undertaken by the **International Consultant** within the assignment process:

a. Elaborate Pasture Inventory Methodology and Grazing Capacity Methodology

In consultation with the RECC Project Team, FAO Project Coordinator (PC), FAO Project Team and National Project Director (NPD), **International Consultant** will elaborate: **(i) Pasture Inventory Methodology** with quantitative and qualitative parameters with view of agreed national needs and requirements and based on LDN, Collect Earth, LADA and PRAGA approaches and **(ii)** Nationally appropriate **Grazing Capacity Methodology**.

a.a) With the above regard, International Consultant will make brief overview on national needs and requirements for pasture inventory for development of stakeholder endorsed municipal pasture management plants Remote sensing and other sources of information will inform this process though for the most part the process will consist of stakeholder workshops to delineate pasture units, describe status on pasture health and supporting infrastructure, identify management objectives for unit and incorporate described activities into municipal grazing plan for municipal, community-managed pastures. If found necessary, for overview of national needs and requirements for pasture inventory, International Consultant will produce a questionnaire which will be distributed by the RECC Project Team among stakeholders (*MEPA, relevant entities of the MEPA, other line ministries, local authorities, farmers associations, NGOs/CSOs, private sector representatives, experts etc.*) to collect necessary information.

a.b) The next step will be elaboration of the draft outlines for the above 2 methodologies.

Draft outline for the Pasture Iinventory Methodology (with parameters /quantitative, qualitative/ based on LDN, Collect Earth, LADA and PRAGA approaches) shall, as appropriate, take into account certain aspects to be included in the outline. Tentative list of the topics for the draft outline is given in Annex I of this ToR.

Draft outline for the nationally appropriate Grazing Capacity Methodology has to cover, *inter alia*, methodological approach for calculation of operational costs, monitoring productive base (pasture plants) and use of testing questions and contextualised decision making support system for existing and transition livestock production systems.

a.c) <u>Draft Outline</u> for Pasture Inventory Methodology and <u>draft Outline</u> for Grazing Capacity Methodology will be validated at validation working meeting of stakeholders and experts.

International Consultant will make keynote presentation/s at the one-day (online) validation working meeting.

When appropriate, International Consultant will be assisted by the RECC Project Team in collection of stakeholder pre/post-meeting feedback information, and will be supported by a GIS specialist for any mapping related tasks

International Consultant shall insure that English language draft versions of outlines for both 2 methodologies, are prepared in time, prior of the agreed date for validation working meeting - so, that there is reasonable time for their translation into Georgian language and further distribution before the meeting among stakeholders and experts. The other supporting materials described in the section 2.1. Specific Task, will also be prepared in a timely manner for needed tasks.

Validation working meeting of stakeholders and experts will be organized by the RECC Project Team. The meeting will be provided with simultaneous translation services.

a.d) Based on stakeholder feedback, International Consultant will elaborate then <u>draft versions of the above 2 methodologies.</u>

a.e) Draft version of the Pasture Inventory Methodology and draft version of the Grazing Capacity Methodology will be validated at one-day (on-line) national validation workshop of key stakeholders (*MEPA, relevant entities of the MEPA, other line ministries, local authorities, farmers associations, NGOs/CSOs, private sector representatives etc.*) and experts.

International Consultant will make keynote presentation/s at the national workshop and produce stakeholder feedback summary report.

International Consultant will be assisted by the RECC Project Team in collection of stakeholder pre/post-workshop feedback information.

International Consultant shall insure that English language draft versions of both methodologies are prepared in time, prior of the agreed date for national validation workshop - so, that there is reasonable time for their translation into Georgian language and further formal distribution before the workshop among national key stakeholders and experts.

National validation workshop will be organized by the RECC Project Team. The workshop will be provided with simultaneous translation services.

a.f) Based on the outputs from national validation workshop and feedback from key stakeholders, International Consultant will develop:

- <u>Final version</u> of Pasture Inventory Methodology

- <u>Final version</u> of Grazing Capacity Methodology

- Supporting recommendations and proposals on linkages of said methodologies to LDN principals and monitoring, recommendations and roadmap for improved silvopastoral production systems and Training and capacity building support on Sustainable Pasture Management and SLM practices.

b. Elaborate Methodology for Development of a Municipal Pastureland Management Plan

In consultation with the RECC Project Team, FAO Project Coordinator (PC), FAO Project Team and National Project Director (NPD), International Consultant will elaborate: **Methodology for Development of a Municipal Pastureland Management Plan** and **LDN framework principals for Monitoring and Evaluation.**

Methodology for Development of a Municipal Pastureland Management Plan shall amalgamate three parts: outline for strategic part and outline for operational part and LDN framework principals for Monitoring and Evaluation.

b.a) With the above regard, International Consultant will make brief overview on national needs and requirements with regard to uniform Municipal Pastureland Management Plan for Georgia. If found necessary, for overview of national needs and requirements, International Consultant will produce questionnaire which will be distributed by the RECC Project Team among stakeholders (*MEPA, relevant entities of the MEPA, other line ministries, local authorities, farmers associations, NGOs/CSOs, private sector representatives, experts etc.*) to collect necessary information.

b.b) The next step will be elaboration of the <u>draft outline for the methodology</u>.

Draft outline shall cover topics for both parts of the methodology - strategic and operational.

b.c) Draft Outline for the methodology will be validated at validation working meeting of stakeholders and experts.

International Consultant will make keynote presentation/s at the one-day (online) validation working meeting.

When appropriate, International Consultant will be assisted by the RECC Project Team in collection of stakeholder pre/post-meeting feedback information.

International Consultant shall insure that English language draft version of the outline, is prepared in time, prior of the agreed date for validation working meeting - so, that there is reasonable time for its translation into Georgian language and further distribution before the meeting among stakeholders and experts.

Validation working meeting of stakeholders and experts will be organized by the RECC Project Team. The meeting will be provided with simultaneous translation services.

b.d) Based on stakeholder feedback, International Consultant will elaborate then <u>draft version of the Methodology</u> for Development of a Municipal Pastureland Management Plan and LDN framework principals for Monitoring and Evaluation.

b.e) <u>Draft version of the methodology</u> will be validated at one-day (on-line) national validation workshop of key stakeholders (*MEPA, relevant entities of the MEPA, other line ministries, local authorities, farmers associations, NGOs/CSOs, private sector representatives etc.*) and experts.

International Consultant will make keynote presentation/s at the national workshop and produce stakeholder feedback summary report.

International Consultant will be assisted by the RECC Project Team in collection of stakeholder pre/post-workshop feedback information.

International Consultant shall insure that English language <u>draft version of the methodology</u> is prepared in time, prior of the agreed date for national validation workshop - so, that there is reasonable time for their translation into Georgian language and further formal distribution before the workshop among national key stakeholders and experts.

National validation workshop will be organized by the RECC Project Team. The workshop will be provided with simultaneous translation services.

b.f) Based on the outputs from national validation workshop and feedback from key stakeholders, International Consultant will develop:

- <u>Final version of Methodology</u> for Development of a Municipal Pastureland Management Plan and LDN framework principals for Monitoring and Evaluation

2.3. Reporting Obligations: Deliverables and Reporting Schedule

International Consultant will report to the RECC Executive Director (Project Policy and Institutional Advisor – *RECC Project Core Team Supervisor/Manager*) and Technical Advisor in Agricultural Development (*RECC Project Core Team Coordinator*).

International Consultant will submit reports (in electronic format) to the following deliverables in English language:

Table 1. Reporting Obligations

Report Index	Name of Deliverable/Means of Verification	Time of Submission

R1	**(i)** Brief Review of national needs and requirements for Pasture Inventory Methodology	March, 2021
	(ii) Validated and agreed <u>Outline</u> for Pasture Inventory Methodology	
	(iii) Validated and agreed <u>Outline</u> for Grazing Capacity Methodology	
R2	**(iv)** <u>Final version of Pasture Inventory Methodology</u>	July, 2021
	(v) <u>Final version of Grazing Capacity Methodology</u>	
	(vi) Technical training of trainers on LDN oriented sustainable pastureland management	
	(vii) Development of recommendations and roadmap for introduction of improved silvopastoral practices and systems	
R3	**(viii)** Brief Review of national needs and requirements for <u>Methodology</u> for Development of a Municipal Pastureland Management Plan	September, 2021
	(ix) Validated and agreed <u>Outline</u> of Methodology for Development of a Municipal Pastureland Management Plan	
R4	**(x)** <u>Final version of Methodology</u> for Development of a Municipal Pastureland Management Plan	October, 2021

All deliverables are subject for review and approval by the RECC.

2.4. Payment Schedule and Estimated Time Input

International Consultant shall submit to the RECC the reports in the form and within the time periods specified in Table 1 (Reporting Obligations) as per Terms of Reference, acceptable to the RECC. The payment mode for the service will be applied based on delivered reports and acts of acceptance (*Service Delivery Acceptance Acts*) signed by both sides (RECC and **International Consultant**) and submitted by the **International Consultant** of original invoices to the RECC.

RECC will only make milestone payment based on achievement of specific deliverables as specified in time schedule for submission of deliverables as per Table 1 (Reporting Obligations).

The schedule of payments and estimated time input are specified below:

Table 2. Schedule of Payments and Estimated Time Input

Report Index for Deliverables	Estimated Number of Working Days	Amount of Transfer	% of total contract ceiling for the Services (*total Value of the Service*)
R1	6	Number of working days x Working day rate	20%
R2	20	Number of working days x Working day rate	50%
R3	5	Number of working days x Working day rate	10%
R4	9	Number of working days x Working day rate	20%
Total	**40**	40 working days x Working day rate	100%

3. OVERALL DUTIES AND RESPONSIBILITIES, QUALIFICATIONS, EXPERIENCE AND TECHNICAL COMPETENCIES

3.1. Overall Duties and Responsibilities

International Consultant will have the following tasks:

- Liaise with the RECC Executive Director (Project Policy and Institutional Advisor – *RECC Project Core Team Supervisor/Manager*), Technical Advisor in Agricultural Development (*RECC Project Core Team Coordinator*), FAO Project Team, MEPA, project partners and other stakeholders to ensure flow of expected deliverables under this Terms of Reference
- Provide technical support to the implementation of the Project approach
- Review of lessons learned and make recommendations for improving the performance and the necessary adjustments to the assignment work plan
- Attend (on-line) and support work of the Project Steering Committee when appropriate as per RECC requirement

3.2. Qualifications and Experience Requirements

International Consultant should have:

- Adequate educational background and specialization in Natural Resources and/or related fields, or work experience equivalent
- At least 5-7 years of international experience and familiarity with agricultural, natural resources use, pasture inventory and grazing issues
- Demonstrated experience with pasture M&E methodologies and communal pastureland management
- Experience working with Georgian landscapes and familiarity with land management issues

3.3. Technical Competencies

- Results focused
- Good expert skills
- Ability to develop good interaction and exchange with a variety of stakeholders
- Good understanding of project document incl. results framework
- Good reporting skills
- Good communication capacity
- Good written and oral working knowledge of English
- Advanced computer skills

4. AWARD CRITERIA

Evaluation will be made in accordance with the quality/price based selection method per REC Caucasus procedures and rules. The best value for money will be established by weighing technical quality against price on an 80/20 basis.

The quality of each technical offer will be evaluated in accordance with the award criteria and the associated weighting as detailed in the evaluation grid specified in Annex 2 of this Terms of Reference.

Annex I. Tentative List of topics for development of the draft outline of Pasture Inventory Methodology

> **Protocols for rangeland and pasture inventory and evaluation**

> **Pasturelands spatial analysis tool/s and computer programs (software)**

> **Required documentation**

> **Inventory timing**

> **Pastureland delimitation** (Collecting all available cadastral geodata, satellite and aerial images, including historical field data, relevant cadaster information and other land cover mapping for digital processing (land use classes, land ownership)

> **LDN indicators and their links to pastureland productivity and management sustainability**

> **Pasture assessment and classification according to their functional use and agrotechnical characterises**

- Identification of (a) non-cultivated pasture (rangeland/natural grassland), (b) pasture (improved, cultivatedPasture)
- Delineation of (a) summer, (b) winter pastures and (c) village pastures

> **Inventory of key grazing areas/units**

> **Pasture conditions and forage inventory**

- Percent desirable plants
- Plant cover
- Plant residue
- Plant diversity
- Plant vigor
- Insect and diseases pressure
- Livestock concentration areas
- Uniformity of use
- Percent legumes
- Soil compaction
- Forage suitability (Forage suitability groups; Climatic and soil factors that influence forage production; Landscape properties influencing forage suitability; Plant rotation system; Pasture/rangeland conditions; Grazing methods; Fodder and Fodder Seed Production; Ecological descriptions on pastures/rangelands; Inventory and monitoring of pasture/grazing land resources; Determining production and composition; Vegetation sampling techniques etc).
- Pasture plot hierarchy: survey details and collection requirements and resourcing
- Pasture survey process, diagrammatic representation referenced to the survey
- Methods, protocols and estimated timing for an average plot
- Plot selection stages (Bioregional stratification; Selecting representative areas to sample; Stratifying areas of sampling interest within bioregions)
- Plot location decision making framework (Choosing plot locations in the field based on areas of interest)
- Trip planning (Plot layout and positioning; Plot positioning using the DGPS; Start up; Operation; Downloading the data; Alternative DGPS malfunction)
- Photo-panoramas
- Vegetation vouchering
- Genetic and isotope sample vouchering
- Point intercept
- Basal area
- Structural summary and homogeneity (Stratum types and growth forms allowed within each stratum type)
- Leaf Area Index
- Soils and Landscapes

- Soil metagenomics
- Plot and Physical Descriptions
- Field data collection Applications
- Post field trip procedures
- Field notes
- Mapping and forage inventory
- Range and pasture utilization estimate worksheets

➢ **Rangeland/natural grassland shrub Inventory**

➢ **Inventory of actual stocking rates** expressed as animal unit days (AUDs), animal unit years (AUYs), or animal unit months (AUMs)

- Use of existing data (all land uses) - Initial stocking rates for rangelands, pasture and hay aftermath

➢ **Identification of pasture health and drought protection indicators and their evaluation**

- Measurement of pastureland health indicators (Rills, Water flow patterns, Pedestals and terracettes, Bare ground, Gullies, Wind-scoured, blowouts, and/or deposition areas, Litter movement (i.e., dead plant material that is in contact with the soil surface), Soil surface resistance to erosion, Soil surgace loss or degradation, Plant community composition and distribution relative to infiltration and runoff, Compaction layer, Plant mortality, Invasive plants, Reproductive capability of perennial plants, etc.)
- Evaluation methods for pastureland health indicators

➢ **Inventory of rangeland and pastureland hydrology and water and wind erosion**

➢ **Methods for assessing land degradation** (Expert opinion; Remote sensing; Field monitoring; Productivity changes; Sample studies at farmer level, based on field criteria and the expert opinion of land users; Modelling)

➢ **Inventory Checklists/Questionaries**

➢ **Inventory Worksheets**

➢ **Inventory Database**

Annex 2. Evaluation Grid

EVALUATION GRID	Maximum
Organisation and Methodology	
(Max 30 points)	
Rationale	10
Strategy	10
Timetable of activities	10
Total score for Organisation and methodology	**30**
Expert	
(Max 70 points)	
Qualifications and skills *Adequacy of Educational background for tasks*	10
General professional experience *(At least 5-7 years of experience)*	5
Specific professional experience	
Experience and knowledge about agricultural, natural resources use, pasture inventory, grazing/livestock and pastureland management planning issues	10
Specific Knowledge of LDN, Collect Earth, LADA and PRAGA approaches to be used in pasture inventory and pastureland management planning	10
Practical international experience in pasture inventory, grazing planning and communally managed pastureland planning	10
Experience in performing of analytical, programmatic and policy-making work in the fields of pasture inventory, grazing planning and pastureland management planning	15
Specific Qualifications and skills	
Writing and communication skills in English and also strong interpersonal and general communication skills, strong cultural sensitivity and ability to work in multi-cultural environments	10
Total score for Expert	**70**
Overall total score	**100**