TECHNICAL OFFER

for the Assignment to

The GHG Inventory and Data Analysis Expert in Agriculture Sector

by

Full name

to

REC-Caucasus

under

the Project

Georgia’s Integrated Transparency Framework for Implementation of the Paris Agreement



# Concept of Assignment

*Please provide a description of the concept for the assignment in accordance to the tabular format presented below:*

| **Deliverables** | **Estimated amount of days required** | **Deadline** | **Approach** |
| --- | --- | --- | --- |
| ***Report on identification of the parameters, coefficients and possible measurement approaches for the field work assignment in order to estimate country-specific cattle gross energy intake.*** |
| **Task:** Identify the parameters, coefficients and possible measurement approaches for the field work assignment in order to estimate country-specific cattle gross energy intake from the pile of parameters that include but not limited to weight (kg), average weight gain per day (kg), feeding situation: confined, grazing, pasture conditions, milk production per day (kg/day) and fat content (%), average amount of work performed per day (hours day-1), percentage of females that give birth in a year, wool growth, number of offspring, and feed digestibility (%).This task includes:* identification of cattle breeds for the research assignment. The native cattle breeds such as Georgian Mountain and Red Mingrelian have to be considered to the extent possible.
 |       | Click or tap to enter a date. |       |
| ***Report on identification of the parameters, coefficients and possible measurement approaches for the field work assignment in order to estimate country-specific emission factors in cattle and swine (by decision of expert) manure management.*** |
| **Task:** Identify the parameters, coefficients and possible measurement approaches for the field work assignment in order to estimate country-specific emission factors in cattle and swine (by decision of expert) manure management from the pile of parameters that include but not limited to digestibility of the feed in percentage, urinary energy, ash content of manure calculated as a fraction of the dry matter feed intake, maximum methane-producing capacity of the manure, manure timing of storage/application, feed and animal characteristics at the measurement site, length of manure storage, manure characteristics (e.g., VS influent and effluent concentrations for liquid systems), determination of the amount of manure left in the storage facility (methanogenic inoculum), time and temperature distribution between indoor and outdoor storage, daily temperature fluctuation, and seasonal temperature variation.This task includes:* selection of the species considered for the research, based on the trend assessment made by the expert;
 |       | Click or tap to enter a date. |       |
| ***Report on identification of the parameters, coefficients and possible measurement approaches for the field work assignment in order to estimate country-specific emission factors for the direct emissions of N2O from managed soils by applying synthetic fertilisers and urine and dung decomposition*** |
| **Task:** Identify the parameters, coefficients and possible measurement approaches for the field work assignment in order to estimate country-specific emission factors for the direct emissions of N2O from managed soils by applying synthetic fertilisers and urine and dung decomposition from the pile of parameters that include but not limited to annual amount of urine and dung N deposited on pasture, range, paddock and by grazing animals, number of head of livestock species/category T in the country, annual average N excretion per head of species/category T in the country, fraction of total annual N excretion for each livestock species/category T that is deposited on pasture, range and paddock.This task includes:* selection of the species considered for the research, based on the trend assessment made by the expert;
 |       | Click or tap to enter a date. |       |
| ***Review report on the research results of the country-specific data by comparing them to the default values and cluster countries’ data*** |
| **Task:** Review the research results of the country-specific data by comparing them to the default values and cluster countries’ data by decision of expert.* + selection of the cluster countries for the review of the data;
	+ requesting research result approval documents from the field workers for supporting the recognition of the country-specific parameters.
 |       | Click or tap to enter a date. |       |
| ***Estimate the CHG emissions from cattle enteric fermentation, cattle (swine) manure management, and managed soils and urine and dung decomposition and synthetic N fertiliser for the sample year*** |
| **Task:** Estimate the CH4 emissions from cattle enteric fermentation, cattle (swine) manure management, and N2O emissions from managed soils and urine and dung decomposition and synthetic N fertiliser for the sample year |       | Click or tap to enter a date. |       |
| ***Recommendations report on applying the obtained research parameters at the national GHG inventory level and further improvement possibilities of the GHG inventory in Agriculture sector*** |
| **Task:** Prepare recommendations for applying the obtained research parameters at the national GHG inventory level and further improvement possibilities of the GHG inventory in Agriculture sector. |       | Click or tap to enter a date. |       |
| **Total Days of the Assignment**  |       | *Total days of the assignment should not be more than 25 man-days**Daily rate in GEL (Gross)*  |
| **Duration of the Assignment** | ***from: Click or tap to enter a date.*** ***to: Click or tap to enter a date.*** |

Draft deliverables of the assignment are a subject of agreement with PMU, CCD, and stakeholders *(if necessary).*

The assignment will be implemented in close collaboration with National mitigation expert, PMU and CCD, including kick off meeting for introductory discussion and regular meetings on consideration of deliverables including JF meetings.