Terms of Reference

Position:	International Consultant for Technical Review of National Greenhouse Gas (GHG) Inventories – Land Use, Land-Use Change and Forestry (LULUCF) Sector
Duty Station:	Home based (with 1 mission to Almaty (3 days) and 1 mission to Nur-Sultan (5 days), Kazakhstan)
Duration:	Estimated 51 consultancy days over the period of 1 June – 31 October 2020
Contract type:	Individual Contract (IC)
Languages:	English (knowledge of Russian is an asset)
Project title:	UNDP/GEF Project "Development of Kazakhstan National communication to the UNFCCC and Biennial report"

1. Project Description

The project will enable Kazakhstan to prepare and submit its Eighths National Communication (8NC) and Fifth Biennial Report (5BR) to the Conference of Parties (CoP) of the UNFCCC in accordance with its commitments as a Party as mandated by Article 12 of the UNFCCC and subsequent CoP decisions. The project will update the information provided regarding national circumstances, inventories of greenhouse gases (GHG), policies and measures undertaken to mitigate climate change, assessments of vulnerability to climate change and steps taken to adapt, and information on public awareness, education, training, systematic research and observation, and technology transfer. The project will also increase the national technical and institutional capacities in preparing the NC/BR and assisting the Government to integrate climate change issues into sectoral and national development priorities that directly contribute to achieving the Sustainable development goal #13.

The implementation of project objectives will support the Republic of Kazakhstan to prepare high quality National Communications (NCs) and Biennial Reports (BRs) to be submitted to the UNFCCC timely (i.e. once in four years in case of NCs and once in two years in case of BRs).

As GHG inventories are a key component of both the NCs and BRs, there are opportunities under the Project, on the one hand - for peer reviewing the most relevant chapters of the last available draft National Inventory Report (NIR) and its review; and on the other hand – for enhancing the level of knowledge of the national experts and partner institutions involved in the development of national GHG Inventory, specifically in the light of the findings of the peer review exercise to be undertaken and of the recommendations for inventory improvements to be considered in the process of developing the NC of the Republic of Kazakhstan under the UNFCCC. One of the findings of the national GHG experts and international expertise was that LULUCF sector in National inventory report occur as a one of the biggest emitter of GHG. National partner (Ministry of Ecology, Geology and Natural Resources) of the project ask UNDP and project to find international expert who will perform enhanced review of the LULUCF sector to find miscalculations or methodological mistakes.

In this regard, UNDP is seeking the expertise of an International Consultant for Technical Review of National Greenhouse Gas (GHG) Inventories – Land Use, Land-Use Change and Forestry (LULUCF) Sector.

Objective:

The focus of this assignment is to:

1) Perform the peer review of national GHG inventory – LULUCF Sector and of Chapter 6 'LULUCF Sector' of the draft 'National Inventory Report: 1990-2018, Greenhouse Gas Sources and Sinks in the Republic of Kazakhstan'. Identify gaps in the methods of calculations of emissions from the

LULUCF sector, give recommendations on improving inventory methodology form the sector (Please see scope of work (1))

2) Support the national team of experts in accounting for Forest Assets using CBM-CFS3 model. Provide solutions and sets up the development of the Kazakhstani model database and running assumption database. Assistance in preparation of updated inventories for Kazakhstan's forests sector to be implemented by the model.

3) Perform 3-day training of the national experts and institutions involved in the development of GHG Inventory for LULUCF Sector (Please see instructions (2)), considering specifically as main background materials:

    a. the tools and training materials;

    b. the peer review findings and recommendations.

4) Provide 5 days workshop for national experts on using the software and data collection as well as projection estimations.

2. Scope of work

(1) peer review of National GHG inventory – LULUCF Sector:

Under the supervision of the Project Manager and in close cooperation with the LULUCF sector national consultants, the reviewer will conduct a detailed peer review assessment of the national GHG inventory, specifically focusing on LULUCF sector and information provided in Chapter 6 'LULUCF Sector' of the draft 'National Inventory Report: 1990-2018, Greenhouse Gas Sources and Sinks in the Republic of Kazakhstan'.

He/she is responsible for producing a timely Peer Review Report of high quality, conforming to overall standards set in the UNFCCC Annex I inventory review guidelines and the corresponding template of the 'Report on the individual review of the annual submission of Annex I Parties'.

The reviewer will examine the data, methodologies and procedures used in preparing the national inventory for the LULUCF sector. The reviewer is required to pay particular attention to key categories, progress in the implementation of any planned improvements, and where recalculations and other changes have been reported.

The reviewer will verify that the data has been calculated transparently, checking also for calculation errors when spreadsheets are provided, and will identify areas for improvement or further work. Particular attention would be given the land use change matrix. The reviewer will highlight any errors, inconsistencies and data gaps and will provide comments on discrepancies in the inventory, including explanations of the possible sources of error. The reviewer will also provide written references of the data sources used to review the inventory.

The reviewer should follow to the UNFCCC Annex I inventory review guidelines and the corresponding template of the 'Report on the individual review of the annual submission of Annex I Parties', specifically the 'LULUCF Sector' and 'Conclusions and recommendation' sections.

In above-mentioned context, the Peer Review Report must contain tentatively the following sections:

1. Sector Overview: it will provide a general overview on the completeness, consistency, and transparency of the national GHG inventory for LULUCF sector;

2. Key categories: it will include a detailed assessment of the inventory for each key category.

3. Non-key categories: it will include a detailed assessment of the inventory for most relevant non-key categories.

4. Final conclusions and recommendations: it will include the main conclusions and recommendations to improve the inventories, inclusive for such categories as: transparency and comparability; completeness; recalculations and time series consistency; Forest Land – CO2; Cropland – CO2; Grassland

– CO2; biomass burning – N2O and CH4. Special focus should be made for checking and providing operational solutions to ensure consistency of time series of activity data for land use and land use change in forest land, cropland and grassland emissions, absorptions (1990-2018 period).

The reviewer will prepare a Peer Review Report at least of 15 pages, depending on the quality of the inventory reviewed.

(2) Accounting for Forest Assets using CBM-CFS3 model

Under the supervision of the Project Manager and in close cooperation with the LULUCF sector national consultants the expert shall perform Accounting for Forest Assets using CBM-CFS3 model. The CBM-CFS3 model is a Windows and MS Office based software modelling framework for stand- and landscape-level forest ecosystem carbon accounting. It is used to calculate forest carbon stocks and stock changes for the past (monitoring) or into the future (projection) with annual time step. CBM is designed to simulate C stock and C stock changes in all C pools in forest lands with outputs fitting to the reporting UNFCCC purpose. It can be used to create, simulate and compare various forest management scenarios in order to assess impacts on carbon.

The model is open source available (freely downloadable) and operates on commercial software (ex. MS Office) and runs on personal computers. Model is implemented by several countries in the world and has also a Russian version. It is already used by some Kazakhstani experts in trial versions over last years.

The expert shall provide guidance to national experts to collect the data from forest management plans, nationally existing data for deadwood, litter, and soil organic carbon and other available sources. Any spreadsheet or other tools used to develop input databases will be handed over to national experts in training sessions. In case of missing adequate data of the required pools the expert should develop a sampling and laboratory processing methodology and schedule, in order to derive nationally specific data.

The expert shall run the simulation and provide the outcomes of the model to the Project Manager. The expert also shall provide a report at least of 5 pages showing his/her findings.

(3) Training of the national experts and institutions involved in the development of GHG Inventory – LULUCF Sector

Under the supervision of the Project Manager the international consultant will perform a 3-day training of the national experts and institutions involved in the development of GHG Inventory for LULUCF Sector, considering specifically:

- the tools and training materials;
- the peer review findings and recommendations.

Target Audience and Objective of the Training Materials

The training materials to be developed and used should be suitable for national consultants with beginner to intermediate level knowledge of national GHG inventory (LULUCF sector) development.

Following this thematic training, the target audience should:

- ✓ Have an overview of how emissions inventories are developed for the LULUCF sector;
- ✓ Have a general understanding of the methods available, as well as of the main challenges in particular areas;
- ✓ Be able to determine which methods suits the Republic of Kazakhstan's situation best; and
- ✓ Know where to find more detailed information on the topics discussed.

The training materials should be developed on the basis of methodologies developed by the IPCC:
- 2006 IPCC Guidelines for national GHG inventories and the 2019 Refinements to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (where applicable).

(4) Training of the national experts and preparation of manual on using CBM-CFS3 model

Under the supervision of the Project Manager the international consultant will perform 5-day training of the national experts and institutions which will be involved in using CBM-CFS3 model for Accounting Forest Assets, considering specifically:

- the tools and training materials;
- the comprehensive user manual for national experts;
- the peer review findings and recommendations.

Target Audience and Objective of the Training Materials

The training materials to be developed and used should be suitable for national consultants with beginner to intermediate level knowledge of CBM-CFS3 model development.

Following this thematic training, the target audience should:

- ✓ Have an overview of how to collect appropriate data required for modelling;
- ✓ Have a deep understanding of the methods available, as well as of the main challenges in accounting of forest assets;
- ✓ Be able to independently use the CBM-CFS3 model.

There are no special requirements for training materials unless the international consultant makes sure that national experts are at a level of independent users of the model by the end of trainings.

3. Expected Outputs and Deliverables

№	Outputs	Estimated Duration	Target due dates	Review and Approvals Required
1	Undertaking a home based desk review of the National GHG Inventory – LULUCF Sector and of the Chapter 6 'LULUCF Sector' of the draft 'National Inventory Report: 1990-2018, Greenhouse Gas Sources and Sinks in the Republic of Kazakhstan and submit a preliminary list of questions to the national inventory team	5 days	7 June 2020	Project manager
2	Submit a first draft of key findings from the national GHG inventory report and preliminary after receiving comments and answers from the national GHG inventory team on the 1st output	5 days	29 June 2020	Project manager
3	Develop CBM-CFS3 model for Kazakhstani forest assets and provide a report on the results of modelling	20 days	27 July 2020	Project manager
4	Visit to Almaty (Kazakhstan) for delivering background training materials, presentations, exercises and case studies on LULUCF Sector during a 3 days	3 days	17 September 2020	Project manager National inventory team Team leader on GHG inventory

	training workshop, with the purpose of enhancing the professional knowledge and skills of the national experts and institutions involved in the development of GHG Inventory for LULUCF Sector			
5	Visit to Nur-Sultan for delivering background training materials, presentations, exercises and case studies on CBM-CFS3 model. Hold 5-day workshop for national experts, in order to make them independent users of the model.	5 days	27 September 2020	Project manager National inventory team
6	Develop a tailored user manual for CBM-CFS3 model	5 days	8 October 2020	Project manager National inventory team
7	Providing the final report on undertaking activities, inclusive the final version of the Peer Review Report, considering the feedback received from the national inventory team, the training workshops and results and findings of the CBM-CFS3 modelling.	8 days	28 October 2020	Project manager

Note: by performance of each above points, the materials/reports should be submitted to Project Manager (PM) for commenting. In case of comments, the expert has to finalize the materials in compliance with the comments and/or to discuss these comments via e-mail and forward the final ones to the PM.

4. Institutional Arrangement:

- Ensures timely and quality execution of works described in the Terms of Reference;
- Ensures unconditional carrying out of requirements of the IC;
- Agrees some results given in the ToR and reports to project manager.

5. Duration of the Work and Duty station:

Approximate contract duration is 1 June – 31 October 2020 (Estimated 51 consultancy days, including training). **Duty Station:** Home-based with one mission to Almaty (3 days) and one mission to Nur-Sultan (5 days), Kazakhstan

6. Qualifications of the Successful Individual Contractor:

Education

- Master's Degree or equivalent (or 5-year university education) in Environmental Sciences or Economics. PhD degree will be considered as an asset.

Experience

- At least 4 years of experience in application of IPCC methodologies for preparation of GHG inventories – LULUCF sector.
- Proven international experience in providing technical review services of national GHG inventories (preferably LULUCF sector).
- Proven experience in using CBM-CFS3 models for accounting forest assets.
- Proven experience in designing and/or providing professional trainings for the GHG Inventory staff.
- Proven experience in providing professional trainings on CBM-CFS3 models.
- Proven experience in working with international or local organizations on similar assignments. Successful experience in working with UN agencies is an asset.
- Prior working experience in Kazakhstan and/or CIS region or knowledge of its current socio-economic situation would be an advantage;
- Excellent communication skills and experience in conducting technical presentations with a variety of stakeholders;
- Good knowledge of Excel, Word, Power Point, and Web navigation;
- Full proficiency in English both written and verbal including ability to review and edit the required project documentation. Knowledge of Russian is an asset.

7. Scope of Price Proposal and Schedule of Payments:

%	Stages of Work
30	Activities 1 and 2
35	Activities 3, 4 and 5
35	Activities 6 and 7

This is a lump sum contract for the entire contract which includes the total cost of carrying out the assignment, through to the end of the assignment. The interested candidate must submit his/her financial proposal in USD, using UNDP template form. The financial proposal should include all the expert's expenses, including his fees, travel expenses* and etc. necessary for obtaining the above results within the Terms of Reference. Payment will be made in tranche after the approval of the report, based on the above results and the signing of the Certificate of payment for the result by the Commissioning Unit.

**Please be noted that in financial proposal the living allowances should be lower or equal to UN daily subsistence allowances, but under no circumstance should they be higher.*

8. Recommended Presentation of Offer:

The following documents only in **PDF** should be attached to the application (proposal) and sent by e-mail to the following address: procurement.kz@undp.org **indicating Ref.2020-045** in the e-mail subject no later than ***15.00 (Nur-Sultan time zone) 15 of May, 2020:***

- Duly accomplished Letter of Confirmation of Interest and Availability and Financial Proposal that indicates the all-inclusive fixed total contract price, supported by a breakdown of costs, as per UNDP template provided;
- Detailed personal CV, indicating all past experience from similar projects, as well as the contact details (email and telephone number) and other supporting information confirming that the Candidate meets the qualification requirements;
- Brief Description of Approach to Work.
- Copies of higher education diplomas and other relevant documents.

Due to the technical features of e-mail, the size of the file/s should not exceed 19 Mb per e-message.

Please make sure you have provided all requested materials. ONLY fully submitted applications would be considered!!!

The type of Contract to be signed and the applicable UNDP Contract General Terms and Conditions, as specified in TOR, can be accessed at http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html

Due to large number of applications we receive, we are able to inform only the successful candidates about the outcome or status of the selection process.

9. Criteria for Selection of the Best Offer

Individual contractor will be evaluated based on a Combined Scoring Method taking into consideration the combination of the applicant's qualifications and financial proposal.
The award of the contract should be made to the individual contractor whose offer has been evaluated and determined as:

- Responsive/ compliant/ acceptable; and
- Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation;
- Technical criteria weight (70%);
- Financial Criteria weight (30%).

* Only candidates who meet the following minimum requirements will be shortlisted for technical evaluation:

At least 4 years of experience in application of IPCC methodologies for preparation of GHG inventories – LULUCF sector.	10 points
Proven experience in using CBM-CFS3 models for accounting forest assets	10 points

* Top 5 shortlisted candidates will be allowed for further technical evaluation.

Minimal Technical Criteria	Weight, %	Min pass points	Max. points
Master's Degree or equivalent (or 5-year university education) in Environmental Sciences or Economics	20%	70	100
Proven international experience in providing technical review services of national GHG inventories (preferably LULUCF sector)	25%	87.5	125
Proven experience in designing and/or providing professional trainings for the GHG Inventory staff	20%	70	100
Proven experience in providing professional trainings on CBM-CFS3 models	20%	70	100
Proven experience in working with international or local organizations on similar assignments. Successful experience in working with UN agencies is an asset	5%	17.5	25
Full proficiency in English both written and verbal including ability to review and edit the required project documentation. Knowledge of Russian is an asset	10%	35	50
TOTAL	**100%**	**350**	**500**

Only the highest ranked candidates who received a score of at least 350 points (70%) upon the result of the technical evaluation will be admitted to the financial assessment.

This TOR is approved by:

Portfolio Project Manager Gulmira Sergazina Signature Date	Gulmira Sergazina 30-Apr-2020
Head of SDU Unit Arman Kashkinbekov Signature Date	Arman Kashkinbekov 30-Apr-2020