Terms of References

Preparation of Sri Lanka's Third National Communication on Climate Change

An Expert Team in Energy, Industrial Process and Product, Agriculture Forestry and Other Land Use, Waste – a firm/institute

I. Project background information

Sri Lanka has ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1993 and Kyoto Protocol in 2002. Consequently, the Ministry of Mahaweli Development and Environment (MMDE) is the National Focal Point to UNFCCC. Parties to the UNFCCC should prepare and submit their National Communications on climate change to the Secretariat of UNFCCC, fulfilling the requirement of the Convention under the Article 12 in respect of National Communications. Accordingly, Sri Lanka has submitted its Initial and Second National Communications in 2000 and 2012 respectively. Presently, Climate Change Secretariat (CCS) of the MMDE) is in the process of preparing its Third National Communication (TNC) on Climate Change.

The project for preparation of the Third National Communication on climate change is a logical continual step towards further implementation of the UNFCCC at national level. Its main objective is to prepare a comprehensive report on the climate change related issues. The analysis conducted within the Second National Communication will be updated and upgraded/extended, which will result in preparation of a comprehensive national report. Furthermore, it will work towards ensuring that climate change issues are not considered as separate to national and local environmental concerns by integrating objectives into national and local strategic planning processes.

The TNC comprises of mainly 5 components as follows;

01. National Circumstances
02. GHG Inventory
03. Vulnerability and Adaptation Measures
04. Mitigation Options
05. Other relevant information (capacity building, education and public awareness, technology transfer and gap related to financial, technical and capacity needs)

In order to prepare the GHG inventory, an expert team, firm/institute will be hired for 18 months.

II. Scope of Work

The national GHG inventory is a key element of the national communication to the UNFCCC. In the context of the UNFCCC, it is a comprehensive listing by source of annual GHG emissions and removals resulting directly from human activities for one year or a number of years. It comprises compiling of emissions and removals of Greenhouse Gasses of major sectors such as Energy, Industrial Process & Product, Agriculture, Forestry & Other Land Use (AFOL) and Waste.

In this purpose, MMDE is planning to appoint an expert team in preparation of GHG inventory for Sri Lanka's Third National Communication (TNC) in collaboration with all the relevant stakeholders in accordance with the GHG Inventory Preparation Guideline developed by UNFCCC and IPCC. This exercise will be based on 2010 data and information. Thus, a team of experts on Energy, Industrial Process & Product, Agriculture, Forestry & Other Land Use (AFOL) and Waste sectors will be hired by the CCS under this consultancy in order to assist the national expert in preparation of GHG inventory.

All tasks related to GHG inventory preparation to be carried out in close communication and collaboration with the CCS in coherent and transparent manner.

III. Duties and Responsibilities:

Specific tasks to be performed by the Expert Team are as follows;

I. Major GHGs such as CO_2, CH_4, N_2O and other indirect GHGs like HFCs, PFCs and SF_6 as well as CO, No_X, SO_X and NMVOCs should be calculated as per the Guidelines of UNFCCC and IPCC.

II. Make necessary arrangement for institutional setup for preparation of GHG Inventory and identify key stakeholders in process of preparation of inventory.

III. Collect/gather all the necessary information and data required to prepare the GHG inventory on Energy, Industrial Process & Products, Transport, Agriculture, Forestry & Other Land Use (AFOL) and Waste sectors.

IV. Calculate sector-wise GHG emissions and validate them by using standardized methodologies on GHG inventory preparation.

V. Submit GHG Inventory prepared by using technical guidelines developed by UNFCCC and IPCC on GHG inventory preparation and inventory reporting to the national expert in order to collect data and calculate GHG emission.

VI. Verification of calculated emissions for the year 2010 for all the sectors on the above by using validated methodologies for GHG Inventory estimates and Quality Control and Quality Assurance.

VII. Assist to preparation a GHG activity database in considering the present and future trends

VIII. Build scenarios for GHG emission in each sector separately and one consolidated by using improved methodology developed by the UNFCCC and IPCC;

IX. Develop a baseline scenario to abate the increase of GHG emissions based on the results from the GHG Inventory and future development plans, particularly in the energy and land use change and forestry sectors;

X. Identify the input data, taking into consideration data gaps and areas need to be improved and identified in the Second National Communication (SNC);

XI. Identify and develop advanced methods to overcoming inventory data gaps for unavailable data.

XII. Identify barriers in obtaining and/or collecting existing activity data for key sources and propose solutions.

XIII. Identify research collaborations and mechanism for identified gaps, improve activity data and emission factors that are reflecting better in GHG inventory process;

XIV. Describe procedures and arrangements undertaken to collect and archive data for the preparation of national GHG inventories, as well as efforts to make this a continuous process, including information on the role of the institutions involved**;**

XV. Archive relevant data, information, and formats used for the project period and for future communications;

XVI. Organize workshops in cooperation with the PMU and other experts to present and discuss the results obtained from the GHG Inventory;

XVII. Prepare and submit updated GHG Inventory of Sri Lanka for base year 2010.

XVIII. Conduct the training workshops on the use of IPCC Guidelines;

IV. Qualifications, experience and skills

The members of the expert team for undertaking project activities should meet the following minimum qualifications, experience and skills;

I. A degree from a recognized university and a M.Sc. in the field of Engineering, Science, Environment and environmental management, economic or equivalent qualifications in any other field related to the project.

II. Minimum of 5 years-experience of working on climate change or a related field

III. Sound and broadly-recognized scientific expertise on various technologies on climate change mitigation in Sri Lanka;

IV. Experience on GHG inventory preparation for National Communications to UNFCCC
V. Understanding the relation of environment / development issues and climate change;
VI. Familiarity with the methodologies for technology needs assessment and the UNFCCC guidelines.
VII. Good communication skills and competence in handling GHG inventory preparation and identify mitigation potentials.
VIII. Advance computing skills on data collection, gathering, filtering, analysis and modeling.
IX. Knowledge on analytical capacity for determining mitigation options for decision-making.
X. Knowledge on Quality Control and Quality Assurance.

V. General:

I. All selected experts shall have excellent communication and reporting skills in English and satisfactory knowledge on essential computer applications.
II. All Experts should be able to plan, execute and monitor programs and meet the targets with no/minimum additional support.
III. All experts shall have sufficient physical fitness to work under busy and pressurized environment.
IV. Initially all contract will be for durations given in each consultancy and would be extended as decided by the project management.
V. All consultants should have correspondence with the Project Director through Technical Coordinator of the Project Management Unit.

VI. Consultancy Fee:

SLR 7,000,000 -7,450,000

The duration of the assignment covered by this ToR is 18 months from the date of contract signed.

VII. Expected output:

The final report of the National GHG Inventory should be prepared in accordance with the UNFCCC guidelines with greater detailed information on direct and indirect GHG sand handed over to the CCS.