

Terms of References

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

Database Specialist - One Post

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 and develop a database for national communication a database specialist will be hired for period of 12 months.

II. Scope of Work

A 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. Further, data are required of Vulnerability and Adaptation measures, Mitigation options and other information related to the National Communications.

In this purpose, MMDE is planning to appoint a database specialist to take lead in preparation of a database for Sri Lanka's National Communication (TNC) in collaboration with all the

relevant stakeholders. This database where base year for data is 2010 and information on Energy, Industrial Process & Product, Agriculture, Forestry & Other Land Use (AFOL) and Waste sectors for GHG Inventory and Vulnerability and Adaptation measures, Mitigation options and other information related to the National Communications. A database specialist will be hired by the CCS under this consultancy in order to assist PMU for development of a database for national communications.

All tasks related to develop a database to be carried out in close communication and collaboration with the CCS in coherent and transparent manner.

II. Duties and Responsibilities

Specific tasks to be performed by the database specialist are as follows:

- I. Identify all sources required for GHG inventory preparation, Mitigation Options, Vulnerability and Adaptation measures and incorporate them into proposed database formats considering UNFCCC guideline and IPCC methodologies.
- II. A database for major GHGs such as CO₂, CH₄, N₂O and other indirect GHGs like HFCs, PFCs and SF₆ as well as CO, NO_x, SO_x and NMVOCs should be prepared in collaboration with the National expert of GHG inventory preparation, PMU and other consultants of TNC.
- III. Development of an integrated data management system that will enable streamlined collection and processing of received data from several institutions
- IV. Development and maintenance of the Database and development of user-friendly reports on a regular and timely manner.
- V. Liaise with all the expert team of TNC project and PMU to design a layout for the database to meet the demand of CCS for future reference and communications.
- VI. Liaise with the expert team to prepare appropriate data gathering formats and analyzing methodologies to collect/gather and analysis of all the necessary data and information required for GHG inventory, Vulnerability and Adaptation measures, Mitigation options and other information related to the National Communications.
- VII. Guide to develop GHG baseline scenarios, abatement options/scenarios for Mitigation Options in each sector separately by using improved methodology developed by UNFCCC and Intergovernmental panel on Climate Change.
- VIII. Develop and use advanced methods in collaboration with national experts for overcoming data shortages that could arise on the process of data and information gathering mechanism of TNC.
- IX. Finalization of the construction of the database and drafting of a simple documentation / manual on how to use the database as well as basic practical training to the PMU and CCS.

III. Qualifications and Skills

The database specialist should meet the following minimum criteria:

- I. A Degree or Professional Diploma on information technology (computer science and database administration).
- II. Prior experience in preparation of database for similar projects with minimum of 10 years.
- III. Highly qualified database management specialized in the fields of data collection data Archiving methods.
- IV. Familiarity with the UNFCCC, IPCC technical guidelines and UNDP policies and guidelines.
- V. Good communication skills and competence in preparation, handling and management of database Advance computing skills on data collection, gathering, filtering, analysis and modeling;
- VI. Knowledge on quality control and quality assurance.
- VII. Background knowledge on climate change and its impacts.

IV. General:

- I. The database specialist shall have excellent communication and reporting skills in English
- II. The database specialist should be able to plan, execute and meet the targets
- III. A selected database specialist shall have sufficient physical fitness to work under busy and pressurized environment.
- IV. Initially all contract will be for durations given in the each consultancy and would be extended as decided by the project management.
- V. All advisors should have correspondence with the Project Director/ Technical Coordinators of the Project Management Unit located in Climate Change Secretariat, Sobadam Piyasa, No.416/1/C, Robert Gunawardhna Mawatha, Battaramulla.

V. Payment :

SLR 1,250,000 – 1,500,000

The overall duration is 12 months. All deliverables should be handed out to PMU. Copies of high resolution charts and graphics should also be handed out to the PMU. During the fulfillment of the assignment, the database specialist will ensure regular communication with the PMU and the National Expert on GHG Inventory preparation, vulnerability and adapataion measures and migigation options and also will ensure a timely delivery of the expected outputs and will regularly inform the PMU of the progress as well as any obstacles that might occur. The hands on training on database are an essential element of this assignment.

VI. EXPECTED output:

A database for TNC with the details information on direct and indirect GHGs, Mitigation Options, Vulnerability and Adaptation Measures to meet the demand of CCS for future reference and communications.