

TERMS OF REFERENCE INDIVIDUAL CONSULTANT

1. Assignment Information

Assignment Title:	Short term international consultant to strengthen climate change knowledge-management systems
UNDP Practice Area:	Climate Change
Cluster/Project:	Cambodia Climate Change Alliance (CCCA III)
Contract Type:	Individual Contract
Duty Station:	Home-based/Phnom Penh
Expected place of travel:	Phnom Penh
Duration of Assignment:	30 working days (August-October 2020)

2. Background

About CCCA

The Cambodia Climate Change Alliance (CCCA) is a joint initiative of the Royal Government of Cambodia and development partners to address climate change in Cambodia. It provides a unified engagement point to pool resources for the mainstreaming of climate change in national and sub-national policies and programmes.

The CCCA has been active since 2010, with significant results including the development of the Cambodia Climate Change Strategic Plan 2014-2023 (CCCSP) and corresponding strategic plans and actions plans in fourteen priority ministries and agencies, the successful operation of a grant facility (42 Government and NGO projects supported in key areas of the climate change response), and increased visibility and understanding of climate change, both within Government and in society at large.

The third phase of the Cambodia Climate Change Alliance programme (2019-2024) builds on these initial achievements and aims to support the scaling-up of the climate change response at national level and in priority sectors by focusing on three main drivers of change:

- i. Ensuring that locally relevant, reliable information on climate change is generated and available to key stakeholders;
- ii. Developing and implementing tools for the effective mainstreaming of climate change in the policies, programmes and budgets of priority sectors (rural development, public works and transport, education, energy and environment);
- iii. Strengthening capacities for the mobilization, coordination and tracking of public and private climate change finance.

The CCCA is closely aligned with the national institutions in charge of climate change. It is implemented by the Department of Climate Change (DCC), within the General Secretariat of the National Council for Sustainable Development (NCSDD), an inter-ministerial body bringing together the representatives of thirty-six ministries and agencies, and twenty-five provincial governors.

The CCCA engages a broad range of stakeholders in line with their respective roles in the climate change response, and promote innovative partnerships between government, civil society, academia and the private sector. It also works constantly on improving information and knowledge availability on climate change and ensures that the information is reliable and updated.

Rationale

Climate change has become one of the greatest global concerns and Cambodia is among the countries most vulnerable to its impacts. It has been identified as an area where building technical and institutional capacities still require improvement in order to enable an effective climate change response.

The Royal Government of Cambodia has mainstreamed climate change in its key strategic national documents, such as the Government's Fourth Rectangular Strategy, the National Strategic Development Plan (NSDP), Cambodia Sustainable Development Goals (CSDGs), and the Cambodia Climate Change Strategic Plan (CCCSP) for 2014-2023, underlining the importance of building human technical, institutional and technological capacities as a major development issue for Cambodia. Availability of relevant climate data and information management systems, tools and technologies for a low carbon resilient development remains a key constraint to the evidence-based policy making and to the work of practitioners involved in the implementation of Cambodia's climate change response.

The CCCA acknowledges the importance of enhancing climate change knowledge and information management as one of the focus areas of the CCCA phase III, is to ensure that locally relevant and reliable information on climate change is generated and available for the key stakeholders.

During the phase II of CCCA, the programme enhanced the data availability by providing support to the DCC in the development of a web-based climate change knowledge and information management system (<https://ncsd.moe.gov.kh/>) which was launched in June 2019 to provide background information on programmes, projects, adaptation and mitigation activities, progress updates, and publish reports under the NCSD and DCC's mandates. On the NCSD's website, a data portal has been created that intends to bridge the knowledge gaps by displaying publicly available and quality assured data in different areas of climate change as they become available by starting with a small number of datasets covering vulnerability assessments, a list of mitigation projects and analysis of institutional readiness and climate finance.

Despite the progress made, a stocktaking conducted by the DCC in the beginning of 2020 indicated that the policy-makers working at the sectoral and sub-national levels often lack the information and knowledge about climate change related issues that they need to effectively conduct their work. They also commented that the user-friendliness of the data portal could be improved. In summary, the available data needs to be expanded to cover a wide range of important climate change aspects for the benefit of developing adaptation and mitigation measures, monitor and evaluate, GHG emissions reduction and the implementation of the key climate change commitment such as the Cambodia NDC update. The integration of climate change related information and data from the line ministries into the NCSD's website is a priority.

To enhance the knowledge and information management aspects of the work, CCCA is seeking an international consultant with a solid experience in research, database management and GIS to formulate recommendations to strengthen information management through the NCSD's website, as well as enhance its current data portal. The DCC has already developed a conceptual knowledge management (KM) framework for the climate change response in Cambodia and guidelines on the functional and non-functional requirements for the knowledge portal which will support accomplishment of this assignment. Innovative ideas and suggestions for additional knowledge tools are also expected from the consultant to enhance the website and the knowledge portal.

3. The Overall Objectives of the Assignment

The main objective of this assignment is to formulate recommendations and specifications to upgrade the existing website and the knowledge portal, including GIS solutions to improve climate change information management in Cambodia.

The functions and expected outputs of the consultant are as follows:

- I. Develop a work plan and methodology;
- II. Collect, review and synthesize available climate change datasets;
- III. Propose an approach to integrate identified datasets in the data portal, including recommendations to improve user-friendliness and incorporate a GIS functionality; and
- IV. Provide specifications for an upgraded website and data portal as well as management/maintenance arrangements taking into account capacities of CCCA/DCC staff and the need to minimize maintenance costs.

4. Scope of Work

The consultant will work closely with the DCC to carry out the assigned tasks. Also, she/he will work with the CCCA team for any technical guidance.

The consultant will be responsible for the effective delivery of the following tasks:

Develop a work plan and methodologies:

- Consult with the DCC/CCCA to get a deep understanding of the needs and requirements related to the data;
- Review the existing data portal and website and analyze identified gaps; and
- Prepare a work plan including a methodology and a schedule for the work.

Collect, review and synthesize relevant climate change datasets for Cambodia:

- Determine which types of datasets and information are important for climate change adaptation and mitigation practitioners in Cambodia; and
- Through consultations with key government and non-government stakeholders, identify and classify relevant datasets and information (accessible either through institutions in-country or

with online access).

Propose an approach to integrate identified datasets in the data portal, including recommendations to improve user-friendliness and incorporate a GIS functionality:

- Seek for improvement of the existing data portal with updated data and enhance their functionality;
- Suggest tools for displaying or visualizing the climate change data/information; and
- The proposed datasets should include but not be limited to the following elements:
 - GIS data portal for available climate change historical data and projections (temperature, precipitation, wind flow pattern, extreme weather events), with disaggregation by communes, districts, provinces and various zones in Cambodia;
 - Datasets contributing to the NDC online tracking system / indicators (under preparation), with automatic data exchange from relevant sector when possible;
 - Dataset and user-friendly visualization tools for data of the three-climate change Knowledge, Attitudes and Practices (KAP) studies, conducted every 5 years. If possible, a GIS map to show the results at the provincial level could be developed. The system developed should allow updates when the reports are available; and
 - Dataset on the health vulnerability index developed by Ministry of Health, and GIS/mapping tool disaggregated to the sub-national level.

Provide specifications for an upgraded website and data portal, as well as management/maintenance arrangements taking into account capacities of CCCA/DCC staff and the need to minimize maintenance costs:

- In consultation with key stakeholders, review proposed upgrades to the website and formulate recommendations on any additional upgrades;
- Needs identified to date include (non-exhaustive list): upgrade of the registration system for GHG emission reduction projects, registration system for climate change adaptation projects, online submission system for Green Climate Fund, GEF, and other climate fund concept notes and proposals;
- Assess existing capacities in DCC and CCCA and incorporate the results of this assessment in the design of the proposed upgrades (choice of technology, hosting arrangements etc.), to ensure that the system can be run by DCC/CCCA with minimal external support. Formulate recommendations on additional training required for DCC/CCCA staff; and
- Following consultations with DCC, provide detailed specifications for the approved upgrades and support drafting of TORs for implementation of these changes by an IT firm, and for any required training / capacity development interventions.

5. Expected Outputs and Deliverables

The deliverables part of this assignment is described in the table below. Those will be reviewed by the CCCA technical team, the knowledge management office of DCC, director of DCC and NCSD management.

Deliverables	Estimated Duration to Complete	Target Due Dates	Review and Approvals Required
Deliverable 1. An initial report including a work plan and a methodology	5 days	August 28, 2020	UNDP CCCA CC Technical Specialist
Deliverable 2. An assessment of available climate change datasets and a proposed approach to integrate these datasets in the data portal, including GIS functionality. Recommendations on proposed improvements to the NCSD Climate Change website	20 Days	October 2, 2020	UNDP CCCA CC Technical Specialist
Deliverable 3. Detailed specifications and TORs for implementation of the approved upgrades, and any required training / capacity development interventions	5 Days	October 16, 2020	UNDP CCCA CC Technical Specialist
Total estimated number of days:	30 Days		

6. Management Arrangement

The consultant will work closely with the teams of the DCC and CCCA and under the direct supervision of the Knowledge Management Officer and the International Climate Change Policy Specialist of the CCCA.

7. Duration of the Work

The assignment is expected to include 30 working days over 3 months (August-October 2020), with the possibility of one in-country mission (for 5 days) in September. The estimated timeframe shown above (indicative only) is provided as guidance.

8. Duty Station

The consultant can work from home and/or work in the Ministry of Environment, Phnom Penh, Cambodia. Consultations with stakeholders in Phnom Penh will be required.

The selected individual contractor is expected to travel to the Country Office (CO) to undertake the assignment in the country (Cambodia) and is required to undertake the Basic Security in the Field (BSIF) training (<https://dss.un.org/dssweb/WelcometoUNDSS/tabid/105/Default.aspx?returnurl=%2fdssweb%2f>) before travelling.

9. Minimum Qualifications

- Minimum Master's degree in Climate Change, Environmental Management, Knowledge / Information Systems Management, Natural Resource Management or another relevant field;
- At least ten (10) years of experience in information systems and data management (including GIS systems) in the context of climate change, environmental, natural resource management or other development programmes, at the national and international levels. This should include a proven track record in research, business intelligence, user experience and creating, consolidating and managing large datasets from different sources;
- Proven experience in working with governmental institutions in establishing or managing data portals, delivering capacity development support and interacting with data producers and users. Experience in Cambodia or in the region preferred;
- Knowledge about the technical aspects of geographical data management and utilization. Proven experience in applying GIS technology and proficiency with GIS software (ArcGIS and QGIS). Experience in overseeing the production of GIS products;
- Excellent interpersonal skills;
- Excellent written and oral communication skills in English; and
- Understanding Khmer would be advantage.

10. Criteria for Evaluation of Level of Technical Compliance of Individual Contractor

Technical evaluation criteria	Obtainable score
Minimum Master's degree in Climate Change, Environmental Management, Knowledge / Information Systems Management, Natural Resource Management or another relevant field;	20
At least ten (10) years of experience in information systems and data management (including GIS systems) in the context of climate change, environmental, natural resource management or other development programmes, at the national and international levels. This should include a	30

proven track record in research, business intelligence, user experience and creating, consolidating and managing large datasets from different sources;	
Proven experience in working with governmental institutions in establishing or managing data portals, delivering capacity development support and interacting with data producers and users. Experience in Cambodia or in the region preferred;	30
Knowledge about the technical aspects of geographical data management and utilization. Proven experience in applying GIS technology and proficiency with GIS software (ArcGIS and QGIS). Experience in overseeing the production of GIS products	20
Total obtainable score:	100

11. Payment Milestones

The successful consultant will be paid on a lump sum basis as per the following milestones:

N	Outputs/deliverables	Payment schedule	Payment amount
1	Deliverable 1. An initial report including a work plan and a methodology	End August 2020	20%
2	Deliverable 2. An assessment of available climate change datasets and a proposed approach to integrate these datasets in the data portal, including GIS functionality. Recommendations on proposed improvements to the NCSD Climate Change website	First week of October 2020	50%
3	Deliverable 3. Detailed specifications and TORs for implementation of the approved upgrades, and any required training / capacity development interventions	Mid-October 2020	30%