TERMS OF REFERENCE Individual Contractor

Assignment Title	Technical Consultant –Groundwater management in Cambodia	
Organization	UNDP Cambodia through Strengthening climate information and early warning systems in Cambodia to support climate resilient development and adaptation to climate change' ('EWS Project')	
Post Level	National Consultant, Individual Contract	
Cluster/Project	Programme Unit	
Duty Station	Phnom Penh, home-based	
Duration	37 working days total from 10 September – 30 October 2019	

1. Assignment Information

2. Background and Project Description

Cambodia is facing mounting development challenges due to climate change. The observed longer dry seasons and shorter, more intense rainy seasons have become a common observation in Cambodia. In addition, climate change exacerbates the frequency and severity of natural hazards (such as floods and droughts), as well as impacts the agricultural production which is dependent on seasonal rainfall. Recovery from such events puts strain on the least developed country's limited resources and forces shifts in development priorities - hindering Cambodia's ability to progress and to achieve its development goals.

The Early Warning System (EWS) is one of the priorities of the Royal Government of Cambodia's (RGC). The purpose of an EWS is to monitor climate and environmental data on a real-time basis, detect adverse trends and conduct reliable predictions of possible impacts in the form of early warning information. An early warning therefore refers not only to advisories in emergency situations, but also to information related to the changing climatic trends revealed after tracking and analysing climate and weather data over time. An effective EWS would thus enable timely response to natural hazards and extreme weather events, to support the implementation of the risk-informed development.

The project "Strengthening climate information and early warning systems in Cambodia to support climate resilient development and adaptation to climate change" (henceforth "the EWS project") is being implemented to assist the Government in achieving the early warning system gaps and challenges in the country. The project seeks to address the current barriers through three complementary outcomes:

- 1. Increased institutional capacity to assimilate and forecast weather, hydrological, climate and environmental information.
- 2. Climate and weather information available and utilized for national, sectoral and sub-national planning as well as for transboundary communication in the region.
- 3. Strengthened institutional capacity to operate and maintain EWS and climate information infrastructure, both software and hardware, to monitor weather and climate change.

In relation to the Outcome 1, the project is assisting Department of Water Supply and Sanitation of Ministry of Water Resources and Meteorology (DWSS/ MOWRAM) in developing nation-wide groundwater management strategy and long-term capacity building program for DWSS / MOWRAM on ground water management in Cambodia.

3. Objective and Scope of Work

The output of this assignment is a document with a proposed groundwater management strategy in Cambodia, detailing the aspects specified below:

- 1. Commissioning a detailed desk study on groundwater situational analysis in Cambodia.
- 2. Commissioning a capacity and institutional assessment on groundwater management in Cambodia, linking the roles and responsibilities of various government institutions stipulated in the disaster management law, water-related law/s and existing policies / national strategies in Cambodia.
- 3. Developing proposed groundwater management strategy in Cambodia.
- 4. Providing recommendations for capacity development plan for groundwater management in Cambodia, for various government entities.
- 5. Conducting basic training on groundwater management in Cambodia.
- 6. Incorporating the comments from the relevant / identified stakeholders of the deliverables and updating the draft based on the comments
- 7. Presentation of findings to the stakeholders (to be organized by UNDP Cambodia)

4. Expected Specific Outputs and Deliverables

Deliverables/Outputs	Estimated Duration	Target Due Dates
Deliverable 1: A report on a detailed desk study on groundwater situational analysis in Cambodia.	8 days	18 September 2019
Deliverable 2: A report on capacity and institutional assessment on groundwater management in Cambodia; including commissioning interviews / focus group discussions / dialog with identified government agencies.	10 days	30 September 2019
Deliverable 3: A report on proposed groundwater management strategy in Cambodia.	10 days	15 October 2019
Deliverable 4: A report on recommendations for capacity development plan for groundwater management in Cambodia.	5 days	24 October 2019
Deliverable 5: Conducting basic training on groundwater management in Cambodia.	4 days	30 October 2019
Total working days	37 days	

5. Institutional Arrangement

Role of the consultant

- The consultant is responsible to provide his/her technical expertise to produce the expected outputs;
- The consultant is responsible in arranging meetings with identified government officials, with the assistance of UNDP project team;
- The consultant shall arrange transportation for his/her mobility in Phnom Penh;
- For this assignment, field visits in the provinces in Cambodia are not foreseen. Should there be necessary of field visit, travel cost and living allowance in the field will be covered by UNDP;
- The consultant shall report on and submit the above deliverables under this assignment to the assigned person, acting as the focal point of UNDP Cambodia;
- The consultant needs to maintain daily communication with the UNDP project focal person as and when problems emerge during the consultancy period, especially if they affect the scope of the job.

Role of UNDP focal person/team

- The UNDP programme unit will link the consultant to related ministries for this assignment;
- The UNDP programme unit will provide overall quality assurance for this consultancy;
- The UNDP programme unit will review deliverables for payment release;
- UNDP focal person will act as the focal person to interact with the consultant to facilitate the assignment, to facilitate the field mission, to facilitate the review of each outputs and ensure the timely generation of the comments from stakeholders on each output.

Review and Approvals

UNDP will review each output and shall provide quality assurance on all outputs produced by the consultant. The assignment will be executed under overall direct supervision of the UNDP Project Manager, with an oversight of UNDP's Programme Analyst and ACD/Programme Team Leader.

6. Duration of the Work and Duty Station

The consultant will work for 37 working days over the period of 10 September 2019 to 30 October 2019. This assignment is Phnom-Penh / Cambodia based.

7. Minimum Qualifications of the Individual Contractor

Education:	• Advanced University Degree in Environmental / Earth Science. Advanced University Degree Masters / PhD on water management and/or groundwater management in Cambodia context is highly desirable.	
 Experience: Substantial relevant experiences on applied research on water management groundwater management, preferably in Cambodia context. A minimum of 5 years of demonstrated experience working on water management. Working experiences in Cambodia on water management and/or groun management. Experience in working with reputable research organization (internationa nationally), government agencies, NGO's or United Nations in carrying out the assignment would be an added value. 		
Other	Time management (in managing deliverables);	
Competencies	Team management;	
•	Professionalism, courtesy, patience;	
	Outstanding inter-cultural communication, networking and coordination skills.	
Language	Excellent written and oral English.	
Requirement:	Proficiency in Khmer.	

8. <u>Criteria for Evaluation of Level of Technical Compliance of Individual Contractor.</u>

Technical Evaluation Criteria	Obtainable Score
Demonstrated relevant academic qualification (advanced degrees) focusing on water	30
management and/or groundwater management in Cambodia context is highly desirable.	
Substantial relevant experiences in water management and/or groundwater management,	50
demonstrated by at least 5 years of related experiences on water management and/or	

groundwater management, preferably in Cambodian context. Demonstrated experiences in working with reputable research organizations / academic	20
institutions (internationally and nationally), government agencies, NGO's or United Nations	
in carrying out the similar assignment / study.	
Total Obtainable Score	100

Only candidates obtaining a minimum of 70 points (70% of the total technical points) would be considered for the Financial Evaluation.

9. Payment Milestone

The consultant will be paid on a lump sum basis (all-inclusive of expense relate to the above assignment including travels outside and inside the duty station and any tax obligation) under the following installments.

No	Outputs/Deliveries	Payment Schedule	Payment Amount
1	Upon satisfactory completion of deliverable 1 and 2	30 September 2019	30%
2	Upon satisfactory completion of deliverable 3 and 4	25 October 2019	50 %
3	Upon satisfactory completion of deliverable 5, including presentation of result to public, to be organized by UNDP Cambodia	1 November 2019	20 %