

## **Draft Terms of Reference**

### **Joint Mission to Support the Royal Government of Bhutan (RGOB) in Developing its Strategic Plan for Climate Resilience (SPCR) for the Pilot Program for Climate Resilience (PPCR) February 6 – 10, 2017**

#### **Summary**

1. A Joint Mission of the Royal Government of Bhutan (RGOB), the Multilateral Development Banks (MDBs) and other development partners is planned in Bhutan from February 6-10, 2017. The overall objective of this activity is to support the RGOB in developing its Strategic Plan for Climate Resilience (SPCR) under the Pilot Program for Climate Resilience (PPCR). The objective of this mission is to (i) undertake consultations on the proposed framework for the SPCR, (ii) finalize Terms of Reference (TORs) for preparation of the SPCR and associated technical studies, and (iii) agree on priority actions and Development Partner collaboration. The mission will be led by RGOB's Gross National Happiness Commission (GNHC) and supported by the Multilateral Development Banks (The World Bank – lead MDB for PPCR, in collaboration with the Asian Development Bank and International Finance Corporation). At the end of the Joint mission, an Aide Memoire will be prepared highlighting agreed actions.

#### **Background**

2. RGOB expressed interest in developing a Strategic Program for Climate Resilience (SPCR), which was approved by the Climate Investment Fund (CIF) in March 2015. Post a rigorous selection process, Bhutan became one of ten countries globally to become eligible for PPCR funding to develop its SPCR and could access US\$ 1.5 million towards preparation. The SPCR provides a medium and long-term vision for enhancing its resilience to natural hazards and climate challenges, and articulates a program of investments and activities to achieve related goals and priorities. The plan document laying out the SPCR is expected to be based on extensive consultations among a wide variety of stakeholders from the Government, civil society, Academia and development partners. Bhutan is executing this grant to develop the SPCR with support from selected MDB's, with the World Bank acting as a lead. The final SPCR document will be submitted to the Climate Investment Funds (CIF) Administration Unit for approval and endorsement by the PPCR sub-committee.

3. As part of the preparation, the grant funding will fund activities including technical and feasibility studies, capacity building and assessments, and operational support. These activities will contribute to the development of an information and consensus based approach to climate resilient development, and to identify targeted investments. The PPCR program will support Bhutan address climate risks and vulnerabilities, in line with the priorities identified under the proposed 12<sup>th</sup> five year plan and the country's INDC. The SPCR process will be used to provide inputs in the 12th FYP (under preparation) and also inform implementation of its INDC. Bhutan is also a member of the V20 partnership on preparedness. Given that preparedness and resilience are part of the same continuum and embody actions to manage risks in the short and long term, the SPCR will also contribute to this process.

## Bhutan's Climate Change Context and Challenges

4. Bhutan is highly exposed to weather and climate hazards such as floods, flashfloods, landslides, Glacier Lake Outburst Floods (GLOF), windstorms and cyclones. According to the International Disaster Database, the ten most significant natural disasters in Bhutan have all occurred in the last twenty years in terms of casualties and number of people affected.<sup>1</sup> The heavy rainfall brought about by Cyclone Aila in 2009 caused Bhutan to incur an estimated loss of US\$ 17 million. The country is also increasingly experiencing prolonged and extreme droughts, which in turn increases the risk of loss of biodiversity, crop yield, agricultural productivity, and forest fires. Unseasonal and intense rainfall and hailstorms can destroy crops, devastating farmers who have no safety net. During the monsoon season, landslides are a major problem for the roads sector, a lifeline for Bhutan. With most of the rivers confined in narrow gorges, blockage of rivers by landslides risk formation of artificial dams that pose great danger to downstream assets such as hydro power. Extreme weather events have significant socio-economic consequences and adversely affect people's livelihoods and well-being, particularly marginal and poorer communities.

5. *With climate change, the frequency and intensity of major hydro-meteorological hazards is expected to increase.* IPCC (IPCC AR4) projections for temperature and precipitation derived from 21 GCMs indicate a median increase by 3.3 degree C for the A1B SERS scenario by 2100, and increases in both min and max temperatures for the region. Available observational data and literature also shows an increase in monsoon precipitation over the Himalayan range by the end of the century. Further, it also shows that in the last few decades, the Himalayan and the Tibetan plateau have warmed at a greater rate than in the last century (Gautam et. al, 2013)<sup>2</sup>. There is evidence of glacier retreat in the eastern and western Himalayas and expansion of glacial lakes is predicted to be the highest in Nepal and Bhutan.

6. *Climate variability and change risks productivity and performance of key socio-economic sectors such as agriculture, hydropower, tourism, transport, infrastructure and water.* Agriculture, livestock and forestry account for 16.77 percent of Bhutan's GDP; electricity and water supply account for 14.15 percent of GDP and construction accounts for 15.46 percent of GDP (Statistical Yearbook of Bhutan 2015, NSB, RGOB). The agriculture sector for example, which engages almost 69 percent of the Bhutanese population (and 56 percent of the country's labor force) (NLFS, 2013), is heavily impacted by climate variability and change. Erratic and heavy rainfall are already impacting agricultural productivity. Farmers increasingly report instability in crop yields, loss in production, declining crop quality, and decreased water availability for farming and irrigation. Extreme weather events expose infrastructure assets (such as hydropower and road network) to increasing risk of floods and landslides, jeopardizing efficiency of operation. Changes in precipitation also has consequences on availability of water for drinking and energy production in the short, medium and long term.<sup>3</sup>

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<sup>1</sup> Bhutan NAPA- 2 Project Document.

<sup>2</sup> [http://www.preventionweb.net/files/14744\\_climatechangevulnerabilityofmountai.pdf](http://www.preventionweb.net/files/14744_climatechangevulnerabilityofmountai.pdf) ;  
<http://onlinelibrary.wiley.com/doi/10.1111/j.1523-1739.2009.01237.x/epdf>;  
<http://poseidon01.ssrn.com/delivery.php?ID=5821140030711181020970010810291120810610320540040400660671220360970>

<sup>3</sup> One of the main challenges to study and understand the impact of climate change in specific sectors is lack of adequate hydro-meteorological data both in terms of area and historical coverage. This scarcity of data impedes establishment of reliable climate variabilities and scenarios. Meteorological observation data is limited to temperature, rainfall and humidity for less than two decades from stations that are concentrated in the mid valleys and the southern belt.

7. To address these risks, RGOB is undertaking numerous initiatives.<sup>4</sup> The SPCR will be critical in informing how they are embedded in a long term vision to address climate resilience, how adaptation in Bhutan can be understood in the context of a low carbon development path, sectors to prioritize or what the role of the private sector may be in supporting climate resilience.

#### **Process and Status of Consultations between RGOB and MDBs**

8. A joint MDB scoping mission - comprising of the World Bank (WB), including the International Finance Corporation (IFC), and the Asian Development Bank (ADB), was undertaken between October 26 and 30, 2015 for initial consultations. The mission was led by the Gross National Happiness Commission (GNHC) of the RGOB and supported by the World Bank in coordination with other MDBs.

9. Subsequently, RGOB with the support of the lead agency, WB has undertaken several rounds of consultations internally and externally, and has been preparing the documentation in support of executing the CIF trust fund for preparation of the SPCR. Based on stakeholder consultations and in collaboration with the GNHC, a project paper has been prepared by the World Bank team which includes a proposed framework for the SPCR. Key pillars of the SPCR framework include: (i) Enhancing the information base for resilience, (ii) Preparedness, Hydromet Services and Water Security, (iii) Sustainable Growth and Resilient Infrastructure, and a cross-cutting pillar on (iv) Improving Governance and Institutional Coordination including private sector collaboration. A draft table of contents for the SPCR is under preparation and will be finalized during the joint mission. In addition, a draft procurement plan for SPCR preparation has been developed and will be discussed and refined during the mission.

10. The National Environment Commission (NEC) with support from the World Bank team is also undertaking an assessment to identify low carbon growth options for Bhutan using Computational General Equilibrium Modelling. This effort is aligned with the development of the SPCR to help Bhutan better prepare the comprehensive strategy and investment plans for both climate resilience and low carbon development and put in place a coordination mechanism and process of engagement on climate issues that build on existing institutional arrangements in the country.

11. Further, CIF has approved the concept note and request for the preparatory grant to fund activities towards preparing the SPCR. The World Bank as the lead agency for the preparation of the SPCR is processing the USD 1.5 million preparatory grant as per the World Bank's operational process for Small Recipient-Executed Trust Fund Grants.

12. **Institutional Arrangements.** The GNHC is leading the preparation of the SPCR, and various technical studies in collaboration with relevant technical agencies. It will be supported by a small implementation unit in GNHC for implementation of activities towards SPCR preparation and for coordination with technical line agencies. Further, GNHC will be guided by the National Steering Committee which is already in place. The committee's role is to provide strategic guidance and direction related to the development of the SPCR. It is convened by the GNHC and is chaired by the Secretary of the GNHC. The committee includes representatives of all the relevant government agencies, NGOs and private sector. The NEC is a member of this committee and will be closely involved in the preparation of the SPCR. A technical working group will be formed with

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<sup>4</sup> World Bank Background Report available upon request: please contact [dtschering@worldbank.org](mailto:dtschering@worldbank.org)

focal persons from the lead technical agencies identified to lead the technical preparatory activities. The ToRs of the technical working group will be formalized during the mission.

#### **Joint Mission**

13. These Terms of Reference are intended to guide the Joint Mission that will be led by the RGOB, in particular by the GNHC.

14. *Mission Objectives:* The objective of the mission is to support the preparation of the SPCR by (i) undertaking consultations on the proposed framework for the SPCR, (ii) developing Terms of Reference (TORs) for the technical studies contributing to the SPCR and the SPCR document development, and (iii) agreeing on priority actions and Development Partner collaboration.

15. The *main activities of this mission* will be to as follows. A draft mission schedule is attached as Annex 1.

- (i) Hold in-depth discussion with relevant stakeholders (Annex 2) for the priority activities to detail the scope of work, methodology, tasks, expected outcomes and outputs, budget, timeline, etc.
- (ii) Organize a half day workshop to present the priorities listed from the above discussions to the PPCR Country Coordination Mechanism (CCM) which is chaired by the Secretary of GNHC and relevant stakeholders from the government, development partners, NGOs and private sectors to agree on the scope of work.
- (iii) Review and finalize terms of reference for preparatory studies and technical assistance/consultancy support needs, as well as the TORs for the preparation of the SPCR document.
- (iv) Review procurement processes for activities to be supported under the preparation grant and refine the procurement plan.
- (v) Explore how to use the PPCR to build a partnership framework for integrating climate resilience into national processes, including those that engage other development partners; and develop a plan for the implementation of consultative activities
- (vi) Initiate drafting of different sections of the SPCR based on available information
- (vii) Discuss and agree on next steps for the preparation process and timetable

16. *Mission Outcomes:* The mission outcomes include (i) an Aide-Memoire highlighting the key findings and agreed actions - This will also include the roles and responsibilities of the core stakeholders and MDBs which will be involved during the preparation of the SPCR, (ii) Draft TORs for development of SPCR and identified technical studies, and an updated procurement plan, and (iii) an initial draft SPCR.

17. *Mission Team:* Please see annex below. The mission is also coordinating with the European Space Agency (ESA) to provide technical input into climate services development. ESA may join the joint mission.

18. *Mission Schedule:* the mission is expected during February 6-10, 2017. The proposed mission program is attached below.

## Annex 1 – Draft Mission schedule

<b>Date and Day</b>	<b>Morning</b>	<b>Afternoon</b>
Day 1 (Monday),	<p><i>Kickoff meeting for the mission</i> GNHC</p> <ul style="list-style-type: none"> <li>- Courtesy Call on meeting with the Secretary of GNHC</li> <li>- Review the mission plan and agree on a common understanding of the scope of work, outputs and next steps</li> <li>- Finalize TOR for SPCR</li> <li>- Discussion on Draft Framework</li> </ul> <p>GNHC and MDBs: Discuss the scope of technical studies, implementation arrangements, support of MDBs for each priority area</p>	<p><i>Discussion among MDBs</i> Discussions with priority sectors-- MDBs and GNHC carry out parallel discussions with priority sectors. NEC will be closely involved in all discussions.</p>
Day 2 (Tuesday,)	<p><i>Discussion with priority sectors</i> 9:30 AM –12:30 AM - MDBs and GNHC carry out parallel discussion with priority sectors and development of TORs. Priority sectors include NEC, NCHM, DDM, MoWHS, etc.</p>	<p><i>Continue Discussion with priority sectors</i></p>
Day 3 (Wednesday,)	<p><i>Working session –</i> Development of TORs for SPCR and technical studies</p>	<p><i>Meeting with Development partners</i> 3:00 PM – 5:00 PM – Courtesy call with other development partners in the country</p>
Day 4 (Thursday,)	<p><i>Working session on SPCR development</i></p>	<p><i>Continued.</i></p>
Day 5 (Friday,)	<p><i>Conclusion of mission</i> 9:30 AM - Final discussion among MDBs and GNHC focal person on Mission outputs</p>	<p>2:15 PM - Wrap up meeting with GNHC and Ministry of Finance</p>

## Annex 2 – Key Stakeholders

Sl.No.	Agency	Core area
1	Gross National Happiness Commission	Focal Point for PPCR; Central planning agency for the RGOB
2	National Environment Commission	Policies and frameworks for climate resilience, environment management
3	Ministry of Agriculture and Forests	
	Watershed Management Division	Oversee, manage and implement watershed management plans
4	Ministry of Health	
	Public Water and Sanitation Division	
5	Thimphu Thromde	
6	Ministry of Home & Cultural Affairs	
	Department of Disaster Management	National coordinating agency for disaster related activities
	Department of Local Governance	Oversee coordination of activities at the local levels – district, Gewog and Thromde levels
	Local governance	
7	Ministry of Works & Human Settlements	
	Department of Human Settlement	Preparation of planning strategies and physical development plans for human settlements that are consistent with the national development policies
	Department of Engineering Services	Disaster and climate resilient infrastructure planning, designing and construction technology
8	Ministry of Economic Affairs	
	Department of Geology and Mines	Mandated to regulate and manage geo-scientific investigations and mining activities in the country
	Department of Hydromet Services	Mandated to provide hydro-meteorological products and services to support policy, planning and decision making
	Department of Renewable Energy	Central coordination agency and the focal point of RGoB on all matters related to renewable energy development
	Department of Hydropower & Power Systems	Mandated to promote sustainable hydropower for socio-economic development
9	Ministry of Finance	Official interlocutor of the RGOB for MDBs

### Annex 3 – Draft Mission Composition of the MDBs

Sl.No.	Agency	Name
1	World Bank	Ms. Poonam Pillai, Sr. Environment Specialist, Disaster Risk Management and Climate Change Unit-South Asia
		Ms. Dechen Tshering, Disaster Risk Management Specialist, Disaster Risk Management and Climate Change Unit-South Asia
		Ms. Arati Belle, Sr. Climate Change and M&E Specialist (consultant), Disaster Risk Management and Climate Change Unit-South Asia
		Local Consultant – To compile background documents, summarize, facilitate the mission, etc.
		Keisuke Iyadomi, Climate Change Specialist, SAR (CGE modeling)
		Naraya Carrasco, Sr. DRM Specialist, GFDRR (TBC)
		Andy Dean, ESA
		Kanta Rigaud, Lead Environmental Specialist or Junu Shrestha (TBC)
2	ADB	Mr. Tshewang Norbu, Resident Representative of ADB, Bhutan Country Office
		Mr. Keiichi Tamaki, South Asia Urban Development Division.
3	IFC	Ms. Harsh Vivek, Associate Operations Officer
		Joyita Mukherjee, Program Coordinator, IFC
		Mr. Om Bhandari, Country Coordinator, IFC Bhutan Office