To: Adaptation Committee and Least Developed Countries Expert Group Mandates stemming from decision 1/CP.21

Submission by:



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Decision 1/CP.21, paragraph 41: Requests the Adaptation Committee (AC) and the Least Developed Countries Expert Group (LEG) to jointly develop modalities to recognize the adaptation efforts of developing country Parties, as referred to in Article 7, paragraph 3, of the Agreement, and make recommendations for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session (CMA 1).

1. What is the range and scope of adaptation efforts? How do you define and document adaptation efforts? Do you encounter any difficulties in terms of data sourcing or completeness?

#### Climate change impacts water resources first and foremost.

The range of necessary adaptation efforts is highly reliant on the climate change impacts in a given country or region. However, it is certain that across the world, climate change further increases the intensity and frequency of natural disasters and water-related extreme events. Water is the first and foremost resource to consider in adaptation efforts, given that climate change impacts are felt through, by, and with water through unpredictable rainfall and floods, water shortages, cyclones, salinization and droughts. These events further exacerbate existing freshwater quality and quantity challenges. Systematically addressing these challenges is, therefore, key to adapting to climate change and reducing the negative impacts of water-related disasters.

### Water security is key to climate adaptation and can offer solutions

Along with the immediate issues surrounding access to drinking water and sanitation and hygiene services, this resource is also fundamental for food security (rainwater and irrigation), human health, energy production, industrial productivity, biodiversity, and virtually every activity that supports prosperity and resilience. To ensure there continues to be enough good quality water for these multiple purposes despite the impacts of climate change, it is important to increase our scientific understanding as well as generate reliable and accessible data on water. In many cases, useful data either doesn't exist or cannot be consulted publicly. When we look closely, however, 93% of the adaptation chapters of submitted INDCs included references to water, and that focus on water must remain as countries confirm their NDCs and move toward their implementation plans.

## 2. Could you provide examples or possible modalities of how adaptation efforts of developing countries could be recognized under the Convention?

#### Integrating water in UNFCCC programmes

For future success of the implementation of adaptation efforts, the Paris agreement must provide entry points for integrating water in the future climate architecture, including in the design of the UNFCCC programmes and mechanisms. The obvious links between water and climate change have for a long time been ignored in international climate summits. COP21 changed that with water events organized by the French and Peruvian Presidencies and partners from the civil society (e.g. commitments made during the Lima-Paris Action Agenda). Given the importance of sustainable water resources management to implement the Paris Agreement and noting that 93% of the Adaptation chapters of INDCs mention water, the World Water Council as an international multi-stakeholder platform organization is committed to contribute to the success of the Paris Agreement and its Action Agenda.

However, keeping Parties' commitment, and elevating the profile of water within the adaptation agenda is a priority. One way to support countries in this would be for the Adaptation Committee to include water as one of its key thematic focus areas in support of facilitating Parties to implement their national adaptation plans or determined actions. The World Water Council, drawing on its members and long experience, stand ready to support this process.

The importance of helping governments and partners in the least developed countries (LDCs) is evident, as those populations are the most vulnerable and are already highly exposed to extreme climate phenomena and will be the most affected by them. These are the same populations with the least capacity to respond and adapt. Given these needs, the Convention should ensure that a proportion of financing is used to enhance the water security of least developed countries.

#### Political Call for action on Water and Climate

In view of raising political awareness for water within the climate change discussions so as to increase water security while reducing injustices, the Presidencies of CoP21 and CoP22, the French and Moroccan Governments, together with the World Water Council, organized the International Conference on Water and Climate: "Water Security for Climate Justice" in Rabat, Morocco, in July 2016, half-way between the two CoPs. Through a high-level roundtable discussion where more than 20 African ministerial delegations participated, a call for action was launched to unite African voices around the specificities of the continent with regard to water and climate change. The "Water for Africa" outcome document calls for attention to be given equally to mitigation and adaptation measures and also calls for the development of specific financial mechanisms to benefit the African continent. This event will result in a Blue Book, and together with the African ministers' call it is going to be presented at a high-level event at CoP22 in Marrakesh, in the context of a 'Water Day', chaired by the French and Moroccan Governments. We believe 1) that such regional cooperative efforts should be recognized and replicated, and 2) that it would be valuable to continue the engagement of CoP Presidencies in the future to continue cooperation specifically on water and climate.

#### Increase visibility for water within the Conferences of the Parties

Since water was not mentioned in the Paris Climate Agreement adopted in 2015 at COP21, other avenues need to be pursued to make water more visible within climate discussions.

The implementation of the Global Climate Action Agenda is an important and innovative commitment that recognizes and involves non-state actors within the UNFCCC in order to attain the goals of the Paris Agreement. Unfortunately, water does not benefit as an

independent category of the GCAA, but is rather embedded under "Resilience." It would be extremely beneficial to create a new category within the GCAA entirely dedicated to water so that water-related actions supporting the implementation of the Paris Agreement would be readily visible and addressed together.

At COP21, a dedicated day to resilience mobilized a wide-range of stakeholders and enabled many events focusing on water to take place in order to showcase the role of water in climate adaptation and mitigation plans and actions. Three key alliances were introduced, the Paris Pact- Basin Alliance, the Megacities Alliance on Water under Climate Change and the Business Alliance for Water and Climate, in addition to other coalitions built around the declaration of engagements. Systematically including a "Water Day" within each of the CoPs would be recommended so as to give water issues the attention that they deserve within climate discussions.

Since CoP21, the World Water Council has been actively maintaining the momentum through key events and will continue to do so in the future. At the same time, #ClimatelsWater, coordinated by the World Water Council, played a key role in this progress, forming a coalition of water partners from around the globe to speak with one voice for water.

### Robust water infrastructure and good governance

Resilience to climate change requires adaptive water management and robust water infrastructure. People most at risk need strengthened resilience to help withstand the impacts of climate change. The World Water Council, in cooperation with the Mexican Government, have just launched a book entitled *Increasing Resilience to Climate Variability and Change: The Roles of Infrastructure and Governance in the Context of Adaptation*. Eleven case studies document successful adaptation efforts in projects, basins and regions in the Americas, Australia, Brazil, China, Egypt, France, Nepal, Mexico, Pakistan, Turkey and South Africa. The case studies argue that reservoirs are essential to build resilience contributing to adaptation to climate variability and change. However, that for them to be effective, they need to be planned and managed within a governance framework that considers long-term perspectives and multi-sector and multi-level actor needs and perspectives.

This also raises the question of financing multi-purpose infrastructure to help the most vulnerable. According to the World Water Council's latest publication on the matter, *Water: Fit to Finance? Catalyzing National Growth through Investment in Water Security*, the quest for greater water security is occurring in the face of increasing hydrologic uncertainty, rivalry between user groups, and the need to provide public goods such as drought prevention, flood control and environmental protection. Historically these different perspectives might have resulted in infrastructure designed with limited uses in mind. Looking to the future, these pressures will be intensified by climate change and increasing demand for water. Hence it is clear that multi-purpose water infrastructure (MPI) is set to become an increasingly important asset class by itself.

## 3. Do you foresee any challenges or barriers in recognizing adaptation efforts of developing countries?

As adaptation efforts must address management of water resources, it may be challenging for some countries, especially vulnerable states/developing countries, to realize their national

adaptation plans, in particular due to lack of financing, capacity or inadequate governance. Often, allocation for water and sanitation investments in national budgets are insufficient in developing countries that have other urgent competing priorities. However, investing in water actually leads to increased resilience to climate change impacts, averted exponential costs and great benefits in increased productivity in the future. In addition, infrastructure planning needs to evolve to fit new requirements and constraints, pressed by climate change, scarcity, conflict over resources and other factors. This implies a more inclusive and systemic approach to the planning of such projects.

2. Decision 1/CP.21, paragraph 45(a): Also requests the AC and the LEG, in collaboration with the Standing Committee on Finance (SCF) and other relevant institutions, to develop methodologies, and make recommendations for consideration and adoption by CMA 1 on taking the necessary steps to facilitate the mobilization of support for adaptation in developing countries in the context of the limit to global average temperature increase referred to in Article 2 of the Agreement.

# 1. What experiences, including lessons learned and good practices, do you consider valuable in facilitating the mobilization of support for adaptation in developing countries?

Case studies from the WWC's most recent scientific publication entitled *Increasing Resilience to Climate Variability and Change: The Roles of Infrastructure and Governance in the Context of Adaptation* have defined and documented how the water sector can provide valuable solutions for challenges posed by climate change and variability.

- Through the Nepalese case study from the Koshi basin, it was found that investment in climate-sensitive and sustainable infrastructure development needs to be smart. It should include investment in institutions and human capital (the enabling environment), such as through better water management, operation of existing assets, or use of green or multi-purpose infrastructure. It is essential to make the best use of existing sources of finance by proper project design, planning, and sequencing. To do this, new sources of finance such as the private sector, the Green Climate Fund, long-term investors, or philanthropies should be harnessed.
- Pakistan's losses from the 2010 flood were the worst in the country's history. The flood, which affected all provinces in Pakistan, killed 1,600 people, caused damage totalling over 10 billion USD, and inundated an area of approximately 38,600 km2. Building resilience to future flood events will require investment in an integrated water resources management and infrastructure strategy. Water supply management affects water storage options and sediment management, which in turn affects the options for flood management. This discussion details a resilience strategy that could help Pakistan to prepare, absorb, adapt and recover from extreme flood events. Resilience to flood disasters will require infrastructure that is properly maintained with coordinated management, an ability to forecast crises and coordinate actions and a pragmatic approach to future uncertainties, such as climate change. Finally, improved governance will be required to implement fundamental change and aid recovery after disasters.

These are just a couple of examples to underline the importance of water as valuable in facilitating the mobilization of support for adaptation in developing countries.

In addition, the World Water Council has also carried out extensive work for many years on financing measures to increase water security to address these gaps, starting in 2003 with the Camdessus Report and followed by the work of the Gurria Task Force in 2006. In 2015, findings of the High Level Panel on Financing Infrastructure for a Water-secure World, co-convened by the World Water Council and the OECD were published in a report entitled *Water: Fit to Finance? Catalyzing National Growth through Investment in Water Security.* This report goes beyond the question of how much finance is required for water infrastructure to address emerging issues, but makes the case that major social action for water has been, and will continue to be needed to meet the future demands of the global population and global economy.

Water infrastructure needs to be multi-purpose to meet the increasing demands for water for agriculture, industry, energy and domestic use. But multi-purpose water infrastructure presents specific financing problems, in addition to those generic to water. The sums involved are typically large, some components are not financially profitable under strict market conditions, many different stakeholders are affected, there are a number of competing users, and conflicts over priorities often arise between them. To cap all this, many large projects are transboundary, involving two or more countries. To meet burgeoning demand, stakeholders need to bring together funds from new and existing sources, such as pension, water, sovereign wealth and climate funds, green bonds and insurance companies, to drive the construction of major water infrastructure schemes.

In addition, the World Water Council has been advising the newly created Heads of State High Level Panel on Water, which has also identified financing water infrastructure as a priority area for its work, which is expected to launch the results of its work at the 8<sup>th</sup> World Water Forum in 2018.

# 2. Which steps would be necessary to facilitate the mobilization of support for adaptation in developing countries in the context of the limit to global average temperature increase referred to in Article 2 of the Agreement?

In Copenhagen in 2009 and in Cancún in 2010, developed countries committed to jointly raising \$100 billion per year by 2020 to help developing countries cope with climate change. As part of the Paris Agreement, this goal was extended until 2025, prior to which a new collective goal will be set. It is important to ensure the pledged amount is provided for the successful implementation of the Nationally Determined Commitments and the National Adaptation Plans and that the Green Climate Fund can be easily invested in water-related projects that will increase resilience to climate change.

For too long, water has been a neglected and marginalized sector in discussions of public policies for growth and sustainable development. In comparison with sectors like energy and transport, water has not received its share of political support. This lack of attention becomes most visible, and dangerous, in the form of insufficient water infrastructure which enables greater resilience to climate change. We see this in countries at all stages of development where not enough is being done to maintain and replace existing systems and structures, nor to prepare the infrastructure for growing future requirements. Water infrastructure–especially large and multipurpose infrastructure–is costly, and its funding needs to receive the attention of the international financing systems. Yet, donors often claim that there is a lack of good quality, fundable projects. An important reason why water infrastructure is so under-funded is that it rarely satisfies the criteria of financial viability required by commercial funding sources. While more could be done to make effective use of existing "traditional" sources of

infrastructure finance, there is both a need and an opportunity to engage with newer sources, such as climate funding, green bonds, pension funds, insurance funds and sovereign wealth funds.

### 3.What methodologies can be used to take the above necessary steps?

We would suggest establishing a means of prioritization for applications to the Green Climate Fund that will strive to improve hard and soft measures related to water resource management, in addition to offering capacity development activities to those seeking funding or mechanism that facilitate donor-recipient interaction.

3. Decision 1/CP.21, paragraph 45(b): Also requests the AC and the LEG, in collaboration with the SCF and other relevant institutions, to develop methodologies, and make recommendations for consideration and adoption by CMA 1 on reviewing the adequacy and effectiveness of adaptation and support referred to in Article 7, paragraph 14(c), of the Agreement.

## 1. What information/data or metrics are needed for the review of adequacy and effectiveness of adaptation and support for adaptation?

It would seem important to harmonize the metrics being used to measure progress on the Sustainable Development Goals with those that will be used to measure progress on the Paris Agreement, so as to minimize the burden on countries' reporting obligations.

As adaptation efforts globally will largely include water-related actions, suitable metrics should reflect water-related aspects of increased resilience to climate change and other related criteria, such as increased investment in water resource management, numbers of new/completed water projects or improvements to existing infrastructure, or a reduction in the number of deaths and damages resulting from water-related disasters.

It is important to recognize that review and reporting will be country driven and that there is no one size fits all solution.

## 2. Which lessons learned, good practices, challenges and barriers have been encountered in such reviews?

N/A

3. What methods can be used to review the adequacy and effectiveness of adaptation and support for adaptation?

N/A