Valuing Wetlands: An Untapped Resource for Achieving a 1.5 Degree Future

As the fifth anniversary of the Paris Agreement approaches, political leaders across the world are formulating, assessing and finalizing the climate strategies that will be implemented in 2020. To make well-informed decisions, leaders need to clearly understand the interactions between climate risks and be well-versed in the strategies that can mitigate them. Putting ecosystem-based approaches, which can incorporate nature-based solutions, as central to Nationally Determined Contributions (NDCs) is therefore crucial and can provide the means through which Parties can simultaneously meet mitigation and adaptation goals, along with a multitude of co-benefits. High-carbon ecosystems such as wetlands offer vast potential for climate change adaptation and numerous co-benefits and ecosystem services that support livelihoods, sustainable local economies and wellbeing.

Key Messages

- Wetlands and peatlands are crucial carbon sinks playing a critical role in the regulation of our climate. The majority of the global soil carbon pool is held in wetlands, and peatlands are the largest and most long-term carbon sinks of any ecosystem.
- The IPCC Special Report on Land and Climate Change also recognizes wetlands and peatlands as important resources for their multiple ecosystem services and functions, including climate change adaptation and the protection of biodiversity.
- CO_2 emissions from drained or burned peatlands amount to five per cent of the global carbon budget. Ongoing loss of peat ecosystems could seriously hamper national targets and, subsequently, achieving the goals of the Paris Agreement. Safeguarding and rewetting peatland should be considered a low-hanging fruit for keeping carbon in the ground, reducing CO_2 emissions and for preventing the loss of water storage capacity and productive land.
- The degradation and loss of natural wetlands is accelerating at an alarming pace. Without immediate actions and proper management, these invaluable ecosystems will be irreversibly destroyed with tragic consequences for human security, livelihoods, biodiversity and climate adaptation.
- Addressing freshwater ambitions explicitly through NDCs, National Adaptation Plans (NAPs) and other long-term strategies for climate change adaptation will help countries to:
    - Step up investments in maintaining and restoring wetland ecosystem resilience.
    - Prevent further losses of existing natural wetland buffers through the adoption of risk-informed development instead of 'business as usual' approaches for water infrastructure and coastal defense, which can further undermine these buffers.
    - Include wetland indicators within monitoring systems for global processes, for instance in the context of the Sendai Framework, Ramsar Convention, Sustainable Development Goals and the Paris Agreement.
    - Highlight where (climate) finance, capacity building and other forms of support may be needed to support implementation of wetland actions.
    - Act as wetland champions providing best practice and bilateral support to other countries with wetland hotspots of importance.
    - Build evidence to make the business case for investing in wetlands as green infrastructure and hybrid (grey-green) approaches
    - Encourage pre-investment, financial incentives and regulations that promote the design and testing of innovative green and hybrid engineering approaches, which increases confidence and unblocks obstacles for investment by the public and private sector.

Policy Recommendations

Based upon these key messages, the following set of recommendations will help national Parties better preserve and capitalize upon the mitigation value of wetlands in NDCs and other climate planning programs.

1. **Countries should use the IPCC supplement on wetlands for national GHG inventory guidelines to report both GHG emissions and sequestration by wetlands.** This is a necessary first step for assessing the mitigation potential of these ecosystems.

2. **Within their NDCs, countries should strongly advocate for the restoration of wetlands and peatlands worldwide — especially during the forthcoming review of NDCs in 2020.** These actions have the potential to contribute to both mitigation and adaptation targets.

3. **Peatlands should be designated as lands with a high mitigation potential that also offer strong opportunities for climate adaptation, biodiversity conservation and sustainable development.** They should be given priority for restoration and wise use in the NDCs and in national policies and strategies of countries with peatlands.

4. **Parties should use the mitigation potential of wetlands as part of a broader effort to reduce carbon emissions and not to compensate for other GHG emissions in the land use, land-use change, and forestry (LULUCF) sector or elsewhere.** This may include categorizing wetlands as their own pillar for the purpose of GHG accounting.

5. **Mitigation activities for the land use sector should prioritise preserving biodiversity and supporting the sustainable use of land as a resource above efforts designed solely for mitigation** (e.g., production of biofuels), which alone can have adverse effects.

6. **More financial investments should be directed towards the use of natural capital for mitigation and adaptation.** While most NDCs include adaptation measures in the water sector, these are largely focused on grey infrastructure. Nature-based solutions currently attract less than 1% of total investments in water resources management.

7. **Parties should ensure that efforts around the sustainable use of inland freshwater ecosystems are not isolated.** These efforts should be linked with implementation of commitments under Multilateral Environmental Agreements (MEAs) such as the Ramsar Convention, CBD, CMS, UNCCD and the UN 2030 Sustainable Development Agenda.

Learn More & Share Your Feedback

This issue brief is based upon a forthcoming report from the Alliance for Global Water Adaptation (AGWA) and Wetlands International. The messages and recommendations contained herein may be altered before finalization based upon input from colleagues in the international water and climate communities. To share your feedback, you can contact us at amauroner@alliance4water.org.

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