Locking Carbon in Wetlands for Enhanced Climate Action in NDCs

Nature-based solutions are gaining more recognition as low-regret, high-impact means by which countries can meet the ambitious targets laid out in their NDCs. Wetlands are found across the globe and yet are often overlooked for their important role in the carbon cycle. Clear guidance and good data will help Parties to the UNFCCC properly value wetlands for their capacity to reduce emissions and store carbon, while simultaneously serving as an integral tool in their climate adaptation strategies.

The following recommendations will guide Parties towards effective integration of wetlands into their portfolio of climate actions.

Wetlands as effective tools in NDC delivery

It is recommended that:

- countries implement land-use based policies such as active conservation of existing wetlands, rewetting of drained peatlands or restoration of degraded mangroves to avoid or reduce emissions. They should also include ways to reduce the drivers of wetland loss such as conversion for agriculture, urbanisation, aquaculture or coastal development.
- wetland management should be part of a portfolio of measures to reduce atmospheric GHG emissions alongside mitigation measures across sectors outside of land use, such as energy and transport.

Focus on key opportunities

It is recommended that:

- active conservation of intact wetlands, particularly across permafrost and tropical regions, should be given priority since these hold vast stores of carbon.
- restoration of degraded peatlands be prioritised, as this action can achieve reductions that may make up at least 5% of global anthropogenic CO_2 emissions. Countries can calculate what contribution these restorations can make to their own GHG footprints.
- policies such as National Adaptation Plans (NAPs), National Biodiversity Strategies and Action Plans (NBSAPs), commitments to the Bonn Challenge, marine spatial planning or hydrological management should be cross-referenced and assessed for synergies with NDCs, as they may also help to decrease emissions or enhance sinks from wetlands.

Cost and benefits

It is recommended that:

- including wetlands in NDCs provides significant opportunities for achieving multiple co-benefits such as flood risk management, water quality improvement, biodiversity recovery, securing migratory pathways, food production and sustainable community livelihoods. These are significant ways to support short-term recovery from disasters and the key to building long-term resilience. As such, wetlands should be considered in any analysis of cost and benefits.
- cost-benefit analyses of wetland projects should take a comprehensive view and incorporate the socio-economic contribution of projects to sustainable livelihoods, food security and community resilience within water catchments and river basins, both upstream and downstream.

Practicalities of including wetlands in NDCs

It is recommended that:

- countries should include wetland management targets in their NDC portfolio and develop a Monitoring, Reporting and Verification (MRV) methodology for their emissions and carbon stock changes.
- Parties undertake clear reporting with regards to implementation of climate actions and reporting on targets identified in NDCs in line with the Paris Agreement. There are several authoritative methods that can be used:
    - Extensive UNFCCC guidance and Common Reporting Format (CRF) Tables exist to facilitate the reporting in a very sophisticated way.
    - The *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands* provides tiered methods to estimate carbon stock and stock difference with varying levels of sophistication to suit country capacities and contexts.
    - The FAO peatland monitoring guidelines (2020) provide a clear monitoring and assessment framework.
    - This can be supplemented with auditing evidence from carbon credit projects (for example, under the Voluntary Carbon Standard (VCS) mechanism).
- GHG inventories need data such as soil type, climate zone, wetland type, size, vegetation composition and management practices in addition to the GHG budgets. Land cover classes should include information on the land use to claim positive or negative changes to the relevant stakeholders. These knowledge gaps need urgent attention.

Learn More

This issue brief accompanies a report from the Alliance for Global Water Adaptation (AGWA) and Wetlands International entitled *Locking Carbon in Wetlands for Enhanced Climate Action in NDCs* (2020). The full report is available at www.alliance4water.org/locking-carbon-in-wetlands.

Special Thanks

The issue brief and full report were made possible by support from the Sector Program for Sustainable Water Policy of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ) of the Federal Republic of Germany.

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