



- i. Title/Heading.

Restore coastal wetland to mitigate and adapt climate change

- ii. Context and rationale.

Coastal wetlands, also known as 'blue carbon' ecosystems, include mangroves, tidal salt marshes and seagrass meadows. The estimated total cover of these three ecosystems is between 35 and 120 million hectares globally – less than 1% of the world's total land area. Seagrass beds, mangroves and tidal marshes store large amounts of carbon. They draw in carbon as they grow, and much of this is later transferred into the rich organic soils held by their roots. The carbon can remain in the soil for thousands of years, making it one of the longest-term climate mitigation solutions.

- iii. An overview of the contribution.

Recent researches show that wetlands, especially coastal wetlands have much higher production than rainforests and therefore efficient in carbon absorbing. If they are not protected, the ecosystems could release huge amounts of greenhouse gases into the atmosphere, potentially jeopardizing the ability of some nations to meet their international climate commitments in the Paris Agreement,

One reason coastal wetlands are such a good tool to cut emissions is because they're fairly easy to manage. Simply put, most governments know where their mangroves, salt marshes and seagrass meadows are located.

- iv. How the contribution leverages living natural systems as a solution to avert climate change?

Globally, coastal wetlands are found on well over 35 million to 115 million hectares. Much of those wetlands are degraded and in need of restoration. Coastal wetlands such as mangroves, tidal marshes, or seagrass beds can be restored by reducing pollution, replanting lost vegetation and/or by repairing the

natural flow of water. Efforts to restore mangroves, salt marshes and seagrasses are already underway in many parts of the world, and there are large areas, particularly of abandoned or unproductive aquaculture where restoration would yield rapid returns in both carbon and co-benefits.

- v. How might the contribution support both climate, mitigation and adaptation as well as other important co-benefits and social, economic and environmental outcomes in coming years. They may include:
 - a. Reduction in carbon emission and carbon capture (GTonnes)
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 - b. Increasing climate resilience
 - c. Yes, as buffer zone to adapt extreme weather and sea level rise.
Losing coastal wetlands causes huge damages to coastal cities.
Social impact (job increase; poverty reduction; Just transition, etc.)
Yes, increase job opportunities by restoring coastal fishery, reduce poverty by providing more seafood. And coastal areas are usually very populated.
 - d. Net economic impact (total in US\$; how was it achieved?)
Increase: Big positive economic impact by increasing related fishery activities. Tourism for healthy coastal wetlands (clean beaches, birdwatching, etc.) is also huge.
Prevention: potential loss caused by extreme weather events and other disasters can be reduced. Florida hit by Hurricane Katrina was a typical example. And the damage and casualty of tsunamis brought to Thailand in 2004 and to Japan in 2011 could be potentially reduced if there were a large area of coastal wetlands.
 - e. Impact on realization of the 2030 Agenda for Sustainable Development (in particular SDGs 1, 2, 6, 12, 13, 14, 15, 16)

Contribute SDGs 1, 2, 3, 6, 8, 13, 14, 17

f. Food security

Provide many seafood for people who live in coastal area.

Loss of coastal wetlands also makes lands in coastal area very fragile, where aquaculture products and rice are usually produced.

g. Minimising species extinction and ecological losses and fostering an increase of biodiversity.

Coastal wetland ecosystem is very important habitat for migratory birds, benthic animal and fishes. The on-going loss of coastal wetlands are bringing many species into the category of Endangered.

vi. Which countries and organisations are involved in the contribution?

Most countries which have coastal wetland.

vii. How have stakeholders (for example local communities, youth and indigenous peoples, where applicable) been consulted in developing the contribution?

The indigenous people's livelihood is depending on these coastal wetland product (fish/seafood) and ecosystem service (bird watching, tourism etc). Through the coastal wetland restoration, we will ask related government department to consult the indigenous people.

viii. Where can the contribution be put into action?

The contribution will work on engaging government, financial institutions, and consumers, as well as capacity building efforts to create the motivation and capacities for the central and local government to make commitments and implement actions for a common goal of sustainable coastal wetland protection and restoration.

ix. How the contribution will be delivered? How will different stakeholders be engaged in its implementation? What are the potential transformational impacts?

WWF's initiative is through engaging with government, public and local

communities that are working synergistically for coastal wetland protection and restoration through a wide range of activities including research and monitoring studies, etc.

- x. Is this initiative contributing to other Climate Action Summit workstreams (industry transition; energy transition; climate finance and carbon pricing; infrastructure, cities and local action; resilience and adaptation; youth and citizen mobilization; social and political drivers; mitigation strategy)?

Yes, especially to infrastructure, cities and local action; resilience and adaptation.

- xi. How does this contribution build upon examples of experience to date? How does the contribution link with different ongoing initiatives?

Wetlands and the migratory birds depending on them are WWF's long time expertise. WWF has also very good reputation and image in this. Failing to continue makes WWF to lose its advantage.

This strong link to Ramsar convention, EAAFP etc

- xii. What are the mechanisms for funding (with specific emphasis on potential for partnerships)?

GEF fund, World Bank, etc

- xiii. What are the means of stewardship, metrics for monitoring?

For wetlands of international importance (Ramsar Sites), we can use RMETT. For areas without administration or under no protection, it is commonly accepted to use bird population as a good indicator of its ecosystem health. We can invite a third party to fulfill this task.

- xiv. What is the communication strategy?

WWF has developed the communication strategy and will regularly update the achievement to the public through self-owned social media and the partner media, like Tencent, Wechat, etc

- xv. What are the details of proponents (indicating the degree of commitment among the countries and organizations that are named).

Ramsar Convention on Wetlands.
Convention of Biodiversity.

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