











TATA CLEANTECH CAPITAL LIMITED

Virtual Stakeholder Roundtable on 'Nature Based Solution: an opportunity to be explored' for COP26 Charter of Actions

Concept Note

1. Background on COP26 Charter of Actions and World Sustainable Development Summit

Under the presidency of the UK in partnership with Italy, the 26th UN Climate Change Conference of the Parties (COP26), to be held from 1–12 November 2021 in Glasgow will aim to mobilize the action on mitigation, adaptation, and resilience, and strengthen the narrative for better alignment with sustainable development goals. COP26 is to deliberate on four key goals: (i) Secure global net zero by mid-century and keep 1.5 degrees within reach; (ii) Adapt to protect communities and natural habitats; (iii) Mobilise finance; and (iv) Work together to deliver. COP26 will bring together countries, companies, civil society, and citizens on a common platform to work towards to a more sustainable future through adaptation, mitigation, finance, and collaboration.

There is a need to address the developmental deficit in emerging economies such as India while simultaneously taking measures to limit global warming as agreed in the Paris Climate Change Agreement. TERI is preparing a COP26 Charter of Actions which will assimilate questions and challenges posed by keys sectors in India. The Charter will also propose probable and sector specific options which can advance climate action and ambition in the country. The Charter will propose a normative framework for a global agenda on climate ambition and action. The Charter is expected to be released at the COP26 in Glasgow. The discussions from COP26 would culminate in a review at a plenary session at the World Sustainable Development Summit 2022, which would assess the efforts of international climate negotiations in securing a sustainable future, and deliberate on future actions.

One of the key area identified for raising ambition includes nature based solutions. The research team would like to seek feedback from stakeholders on this thematic issue so that the document can be informed and strengthened further.

2. Objectives of the Stakeholder Roundtable

The objectives of the stakeholder roundtable include the following:

(1) Engage with stakeholders and experts on themes/ sectors to solicit feedback to strengthen the sectoral/ thematic chapter.

(2) Solicit inputs for the chapter from stakeholders and experts on aspects related to implications for the international community, equity, actions by 2030, and actions by 2050.

3. Overview of the Theme/ Sector as Covered in the Chapter

Technological solutions for mitigating and adapting climate change are expensive. These solutions are difficult for developing and poor countries to implement while Nature based Solutions (NbS) are cost effective, sustainable and long-term solution to mitigate and adapt climate change such as water conservation traditional techniques, community-based governance of natural resources, use of organic compost, and change in environment friendly life style and energy efficiency. It is estimated that Nature-based Solutions provide more than one-third of cost-effective climate mitigation required till 2030. Thus, NbS can potentially be a critical component of UK Government's campaign for COP 26, being a host country and given its Action Pledge around NbS.

NbS has the potential to support broader climate strategies (e.g., Net zero emissions) while enhancing livelihood benefits and ecosystem services. Research has shown that 20 conservation, restoration, and improved land management actions that increase carbon storage and/or avoid greenhouse gas emissions across global forests, wetlands, grasslands, and agricultural lands. IUCN categorizes all NbS under five approaches—Ecosystem Restoration, Issue-specific Ecosystem-Related, Infrastructure-Related, Ecosystem-based management and Ecosystem protection. NbS can provide 37% of cost-effective CO2 mitigation needed through 2030 for over 66% chance of holding warming to below 2 °C. One-third of this cost-effective NbS mitigation can be delivered at or below 10 USD / MgCO2. Most importantly, all NbS are not necessarily a new knowledge but it is reinvention of existing solutions and Traditional Ecological Knowledge (TEK) with climate perspective.

India's economy shrunk by 23.9% in June and another 7.5% by September 2020 as a fallout of the Covid-19 pandemic. While India has been fully committed to meeting its Paris Agreement and other sustainable development targets, it is imperative that it prioritize economic growth in the short term to ensure stability and reducing vulnerability. Placing Nature-based Solutions at the centre of its economic planning can go a long way in helping build back a more resilient and healthy economy in the country. There is a need to understand various strategies and activities in various sectors in India which are directly impacting natural ecosystems so as to identify relevant NbS such as agro-forestry, agriculture value chains, biodiversity conservation, soil and water conservation, etc. Especially in the forestry sector, agro-forestry has proven to be a successful nature-based solution for dealing with the uncertainties in agro-food systems framework due to climate change and increased appearance of extreme events.

The extent of trees outside forests (TOF) including area under agro-forestry in the country has been assessed 29.38 m ha which is 8.94% of the total geographical area of the country. Agro-forestry has been strongly advocated along with Sustainable Forest Management which would balance forest-based livelihood through sustainable harvesting of Minor Forest Produce. The Forest Survey of India has highlighted that TOF form a nearly 38% of the carbon sink in forest & tree cover of the country. Further, agro-forestry if managed in a climate smart manner then has a potential of achieving 2/3rd proportion of India's forestry sector NDC targets. Agroforestry is also able to improve farm resilience due to the increased farm diversification, self-sufficiency and reduced production costs. They can also improve community resilience and enhance mitigation through e.g. carbon sequestration and reduced mineral fertilizer needs as recommends the National adaptation strategies (NAS) and plans (NAP). Smallholder farmers are vulnerable to environmental, climate and weather-related stress, including climate change. There is an increase in understanding of the benefits of agroforestry systems both at farm and landscape scales, and that incorporating trees on farms through agroforestry systems has emerged as having the potential to enhance the resilience of smallholders to current and future climate risks including future climate change. It goes on to identify challenges in the promotion and adoption of agroforestry at the farm and landscape levels as a Nature Based Solution. In order to maximize the benefits from agro-forestry as a nature-based solution further research along with policy and dissemination efforts are required to identify entry points for agroforestry adoption. Application of such solutions will only happen through corrective measures in existing programmes and policies, upscaling of the solutions, availability of finances and so on.

Hence, the webinar on *Nature based Solutions (NbS): An opportunity to be explored*, is being organized to understand sectoral NbS approaches, with a special focus on forestry sector cost effectiveness of these solutions

and the policy paradigm to undertake bold actions to conserve, restore and sustainably manage nature for climate mitigation and adaptation as well as achieve the SDGs.

4. Format of the Event

The roundtable will begin with welcome remarks with the speaker briefing the audience of the expectations from the discussions. The TERI study team will make a presentation on the theme/ sector as covered in the COP26 Charter. This will be followed by a roundtable discussion comprising 5-6 experts and stakeholders who will provide feedback and inputs on specific questions which will be posed by the team. In the final segment of the event, the discussions will be summarized and next steps will be communicated. The team will also circulate a post-event questionnaire for any further inputs. The inputs provided by the experts will be duly acknowledged in the COP26 Charter of Actions.

5. Questions for discussions

The following questions will guide the roundtable discussions:

- i. In the case of Agroforestry as a Nature based solution, where can the ambition be raised further?
- ii. What gaps need to be filled for realizing the ambition? What actions are needed?
- iii. What measures can be foresighted as short term as well as long term interventions to promote agro-forestry as a nature based solution in the country?
- iv. How can the international community play a role in the promotion of Agroforestry as NbS? What are the 'asks' from the international community?
- v. Based on sectoral/ thematic learnings, what are the normative implications for the global framework on climate ambition and action?