

Nature-Based Solutions as a Catalyst for Achieving Mutual Benefits for People, Nature and Climate

Lessons learned from China and globally

SUMMARY REPORT

This high-level international event was jointly organized by the China Council for International Cooperation on Environment and Development (CCICED) and the International Institute for Sustainable Development (IISD). It focused on the evidence of nature-based solutions (NbS) for biodiversity, climate mitigation, and adaptation outcomes. The event featured speakers who shared their experiences in applying NbS for long-term social, ecological, and economic benefits.

Overview of Event Analytics	
Total # of registrants	816
Total # of attendees	374
# of unique attendee countries	70
# of unique attendee organizations	150

OPENING REMARKS

Patricia Fuller, Canada’s Ambassador for Climate Change, provided opening remarks. She highlighted Canada as one of the signatories to the Pledge for Nature, describing NbS as one of the key solutions for global resilient recovery and the importance of linking NbS to adaptation benefits. She underscored Canada and Mexico’s leadership at co-leading the Nature-Based Solutions Action Track under the Global Commission on Adaptation, which aims to accelerate the uptake of NbS for climate adaptation by profiling the leadership of countries and cities, identifying innovative approaches for financing these solutions, and engaging Indigenous communities and youth. More interesting initiatives to demonstrate the value of NbS for adaptation will be highlighted at the Climate Adaptation Summit (January 25, 2021).

Scott Vaughan, International Chief Advisor to CCICED, provided an introduction to CCICED’s work on NbS and highlighted China’s strong engagement in biodiversity conservation. It has become a normative philosophical framework of China’s vision called “ecological civilization,” which includes the innovative implementation of biodiversity conservation, particularly large-scale spatial planning (known as “ecological redlining”) and a goal to have 25% of terrestrial biodiversity in China under formal protection. China also pledged to be carbon neutral by 2060. It is unleashing a wide range of activities that aim to achieve carbon neutrality, including the world’s biggest carbon market and protecting areas of high carbon sequestration. In the fall of 2020, CCICED launched a subgroup on NbS with strong engagement from both Chinese and international experts that focuses on safeguards, community engagement and benefits, and measurement.

PART I | Context Setter: Unlocking the potential of NbS

Aloke Barnwal, Senior Climate Change Specialist from the Global Environment Facility, underscored NbS as a key solution for global and local climate adaptation and for resilient recovery post-COVID-19. Despite the growing recognition of NbS and its benefits, a number of systemic barriers to large-scale adoption exist. These barriers include challenges in converting policy targets into practice and investment; institutional limitations (a lack of supporting governance framework); knowledge and financing gaps, such as the inclusion and mainstreaming of public domestic and private finance. He pointed out that an emerging policy and financing landscape for NbS needs to include strong political leadership for NbS, biodiversity, and tackling climate change. More funding for innovative NbS financing for adaptation is emerging, including through blue bonds, insurance for the restoration of nature, and coral reef insurance. He added that private sector engagement on innovation, technology, and investment needs could be strengthened, as could knowledge creation (i.e., International Union for Conservation of Nature NbS standards, the Global Environment Facility's Scientific and Technical Advisory Panel). Mr. Barnwal further emphasized the importance of emerging global partnerships between cities by ICLEI Local Governments for Sustainability, C40 Cities Climate Leadership Group, World Resources Institute, and the Science-Based Target Network of Global Common Alliance, which enable companies and cities to set targets for nature.

PART II | What NbS Can Do for Us

This session highlighted the potential and value of NbS and how they have contributed and can contribute to national policy commitments and implementation. It explored the evidence and results of investments made so far.

Speakers:

- **Mr. WANG Yi**, Vice President, Institute of Science and Development, Chinese Academy of Sciences, Co-Team Lead, CCICED SPS 1-1 Global Climate Governance and China's Role
- **Sofie Vandewoestijne**, Project Adviser, European Commission DG Research and Innovation
- **Akanksha Khatri**, Head of Nature Action Agenda, World Economic Forum
- **Bernice Lee**, Executive Director, Hoffmann Centre on the Sustainable Resource Economy, Chatham House, CCICED Special Advisor
- **Mr. Zou Changxin**, Division Director of Research Centre for Ecological Protection and Restoration, Nanjing Institute of Environmental Science, Ministry of Ecology and Environment.

WANG Yi

Mr. WANG shared insights about NbS within the modern context of China's ecological civilization. It should be noted that NbS is not a new concept in China. NbS-related work under different labels has been utilized for water conservation, farming, reforestation, and other activities for many years. Since the economic reform of 1978, NbS has garnered attention from the Chinese government, as this concept relates to the modernization of the top-level national strategies and system orientations. In recent years, NbS concepts have been found in work related to conservation and ecology. Recent NbS activities that China has undertaken include promoting NbS through spatial planning in land use (national parks for conservation, ecological redlining, green urban development, eco-compensation and natural-capital accounting); establishing ecological civilization through a circular economy (i.e., enforcement of a nation-wide trash-sorting system); establishing a sustainable green value chain with a focus on soft commodities (timber, soy, beef, palm oil); utilizing NbS to provide direct synergies between biodiversity conservation and climate change; and building a governance system with long-term planning and an evaluation system based on NbS (i.e., a national measurement, reporting, and verification system).

Sofie Vandewoestijne

Ms. Vandewoestijne identified three pillars of NbS (environmental, social, and economic) and stressed the innovative aspects of NbS for implementation as well. These considerations include stronger private sector engagement that would require establishing the corresponding technical, governance, and regulatory framework. It is also vital that NbS is utilized to identify synergic collaborative areas to address both climate and biodiversity issues; the new European Union biodiversity strategy will be central in moving that agenda forward. The Horizon2020 program has been proposed as a leveraging instrument to upscale NbS (i.e., a flagship initiative of sustainable urbanization), as it calls for cooperation with China to expand the scope of work beyond urban areas.

Akanksha Khatri

Ms. Khatri shared the recent World Economic Forum report on nature risk pricing (warning of biodiversity loss and ecosystem collapse as one of the top five threats humanity will face in the next decades) and the independent review commissioned by the United Kingdom's HM Treasury on the economics of biodiversity. Both reports noted the issue of asset management, as the current economic model accounts only for capital generated by humans while the biosphere in which society and the economy resides and operates is left unaccounted for. Previous assumptions that sustainability is a costly expenditure need to be retired, as it has been acknowledged that all private businesses have a dependency and impact on nature. Furthermore, the move towards a nature-positive path will unlock an estimated USD 10.1 trillion in business opportunities and 395 million jobs. As humans have a duty to establish the frameworks for the governance of NbS within our global commons, the private sector plays an essential role in reaching carbon neutrality. Significant improvements in recent years (e.g., Walmart's plans to become a regenerative company; Danone and Unilever pushing an agenda of regenerative agriculture) have strengthened resilience and enriched communities' livelihoods, infrastructure, etc., using NbS projects.

Key takeaways from the discussion:

- The transition and integration of NbS in major industries (in China and beyond) remains a major challenge, highlighting the need for proper valuation. NbS is still unknown to many decision-makers, and we need to connect it with food systems and people's livelihoods to address systemic barriers. So far, NbS has not been incentivized in agriculture, reflecting the need to anchor NbS beyond carbon sequestration.
- How governments are encouraging buy-in and the role multilateral investment banks play were illustrated in two examples, one from the Seychelles and Pakistan on debt-for-nature swaps and one from the European Investment Bank that outlines how the Climate Bank Roadmap is aligning financing with the Paris Agreement.

ZOU Changxin

Mr. ZOU described China's ecological redline protection as systematic with a wide range of coverage in its scope. With China's new spatial planning strategy, there are three major "spaces" to be considered: urban, agriculture, and ecological. Environmental benefits of the redline include enhanced security for ecologically sensitive and vulnerable areas, high-quality ecosystem services and products, and setting the best-practice model for conservation and spatial planning at the international level. As the ecological redlining in China aims to strictly protect and prohibit most urban development and construction activities in ecologically fragile areas, urban planners also face the challenge of balancing development and conservation.

Bernice Lee

Ms. Lee highlighted several high-level next steps in proceeding with NbS. She emphasized place-based implementation of NbS with long-term planning rather than utilizing NBS as a green PR campaign; protection of long-standing intact ecosystems, biodiversity, and regenerative agriculture; and safeguarding the integrity of the carbon-neutral commitments from the global community through international, national, and local, as well as private sector-based processes (i.e., supply chain management).

PART III | Building the Business Case for NbS

This session explored different stakeholders' perspectives on what needs to take place to scale up NbS and how we can continue to build the business case using different tools and policies.

Speakers:

- **Andrea Bassi**, Senior Associate, IISD – “Assessing the Economic Value of Nature-Based Solutions”
- **Oliver Schelske**, Natural Assets & ESG Research Lead, Swiss Re Institute
- **Rachel Terry**, Programme Lead for the theme of “Accelerating Climate Initiatives,” Van Oord.
- **Sagarika Chatterjee**, Director of Climate Change, Principles for Responsible Investment and COP26 High Level Climate Action Champions Team and Co-Team Lead, CCICED Special Policy Studies on Green Finance

Andrea Bassi

Mr. Bassi spoke about IISD's Sustainable Asset Valuation tool and the importance of a process to improve the predictability and knowledge of the performance of NbS. To achieve this, we need a large number of case studies, and we have to improve the predictability of climate impacts to understand how NbS respond. This will allow us to compare NbS to other infrastructure assets. Mr. Bassi stressed the need to evaluate NbS projects and take a systematic approach that looks at the social, economic, and environmental outcomes of the project throughout its lifetime, as well as the outcomes for other economic activities. The approach should also consider the impacts on different stakeholders. He emphasized that a variety of tools need to be used to accommodate the unique interrelations in each context, which requires knowledge integration and a customized approach to each NbS project. That customization can only be performed when using a multi-stakeholder and co-creation approach to make sure all possible outcomes are captured. To increase confidence that NbS provide better value for money in relation to built infrastructure, we need to highlight tangible and intangible benefits—many services provided by NbS may remain silent until an extreme event strikes. He further emphasized the need to make NbS an asset class that reflects the unique characteristics of this investment.

Oliver Schelske

Mr. Schelske highlighted SwissRe's work with respect to modelling extreme events, as it represents an issue for reinsurance. He noted that NbS could generate a lot of value and provide financial protection against catastrophic events (for reinsurance). In this vein, he emphasized the need to focus communication on nature's contributions to people. With this in mind, SwissRe started to build nature-based insurance solutions—actions inspired and supported by nature that build resilience and provide social and economic benefits, showcasing the high level of interdependency between nature and economic activity.

Rachel Terry

Ms. Terry emphasized how the private sector is using their practical experience and knowledge of land and water to provide solutions that are pro-active and support climate resilience, including mangrove restoration and sand dunes. She stressed the importance of transparency in the projects as well as engaging and working with the local population so that solutions are sustainable and have the required buy-in. She further noted that pilot projects are important to build the right perception within local communities but that there is a need to look at the landscape level in order to move to large-scale implementation. She underscored that building the business case should go beyond just financing, highlighting the social and environmental impacts of NbS. She added that, in order for the private sector to further invest in and implement NbS, more political steering and financial support are required.

Sagarika Chatterjee

Ms. Chatterjee provided some perspectives on financing more sustainable solutions, including the development of a sustainable NbS market with safeguards and agricultural subsidy reform. She pointed to the opportunities that exist around negative emission technologies and the revenue that can be generated, as well as the need to better understand the return on investment of NbS. She further added the need to incorporate positive financial principles (no net loss) and safeguards to build a new market.

CLOSING REMARKS

Scott Vaughan provided three concluding remarks, pointing out the growing and non-linear threat of ecosystem degradation highlighted by the COVID-19 pandemic, the importance of integrated or systemic approaches, and applying NbS based on standards and principles as well as within specific safeguards.

LITERATURE SHARED AND CITED DURING THE EVENT

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This summary has not been previously reviewed by the speakers and does not reflect CCICED official opinions.