



WWF Submission to the Intergovernmental Consultations on Nature based-solutions UNEA Resolution 5/5 of 2 March 2022

2 May 2023

Through this submission, WWF, based on its experience on the ground and NbS publications, provides the following inputs to the 3 tasks of the NbS intergovernmental consultations:

- Principles to secure high quality NbS interventions
- Methodology and complementary indicators to track NbS progress on the ground
- Database as a model on how to identify high quality NbS interventions
- Enabling conditions to implement high quality NbS interventions

WWF welcomes the UNEA Intergovernmental Consultations, led by UNEP, and is pleased to respond to the call for submissions to input the three specific tasks outlined in the background paper.

1. Input to task 1 on “Compile examples of best practice on NbS” and task 2 on “Assess existing and discuss potential new proposals, criteria, standards and guidelines”

1. 1 WWF Background information

WWF has developed the following publications and tools that contribute to the UNEA NbS intergovernmental consultations process on (1) identified gaps in terms of geography, specific types of NbS and the challenges addressed; and (2) criteria, standards and guidelines. WWF submits the following sources of input:

1. [How to design high quality NbS field projects: a guide for Practitioners](#)
2. [WWF Nature based Solutions Database Map](#)
3. [Working with Nature to Protect People: How Nature-based solution reduce climate change and Weather-related disaster](#) (WWF-IFRC)
4. [A Blue-print for high quality interventions that work for nature, people and climate](#)
5. [Nature based Solutions for climate change](#)
6. [Integrity principles for benefit sharing in forest NbS for climate mitigation](#)
7. [Urban Nature based Solutions - Cities Leading the way](#)
8. [Making the Case for Investing in Nature: A Case Study from Tshwane](#) (WWF, IISD and City of Tshwane)

1.2. WWF inputs to the UNEA process on task 1 and 2

WWF proposes to set a baseline for high quality NbS interventions that could be applied by all - understanding the different realities - with the following principles, standards/methodology and indicators to measure impact and track progress; considering using the IUCN Global Standard as a framework and benchmark.

1.2.1. Principles

a. Principles applied to all types of NbS interventions ¹

1. Be a place-based intervention that uses the functioning power of ecosystems;
2. Explicitly address one or more of the identified societal challenges (climate change mitigation, adaptation and disaster risk reduction, food security, water security and health)
3. Use nature sustainably; and improve/enhance biodiversity
4. Consider the co-benefits and trade-offs of the nature-based solutions for people and biodiversity
5. Contribute directly and tangibly to human wellbeing at the local level, if addressing the societal challenge does not do this directly
6. Be designed and implemented with engagement, participation, and consent of all the stakeholders in the area of your project, especially IPLCs, youth, women, people with disabilities and other marginalized community members
7. Have a landscape/seascape intention and cross-sectoral and thematic approach
8. Be context specific and appropriate
9. Must be cost-effective in relation to other solutions (such as hard infrastructure or technological ones)
10. Have the long-term perspective in mind, even if the funding is short-term

b. Additional principles applied to specific societal challenges

Climate change²

1. Result in increased climate ambition and ecosystem functionality;
2. Measurable and traceable: Outcomes can be quantified and attributed to interventions;
3. Synergistic: Help reduce and/or avoid emissions and/ or reduce human vulnerability while conserving nature and trade-offs among other societal goals as well as avoiding adverse impacts on biodiversity;
4. By design, nature-based solutions for climate mitigation should simultaneously prioritize improvements to livelihoods and human well-being, the protection and enhancement of nature, and the generation of carbon reductions or removals³

¹ [How to design high quality NbS field projects: a guide for Practitioners](#). Page 8 and 9.

² [Nature based Solutions for climate change](#).

³ [A Blue-print for high quality interventions that work for nature, people and climate](#)

Additionally, on benefit sharing in forest NbS⁴ for climate mitigation:

5. Fairly distribute equity
6. Enable accountable transparency and understanding; and real grievance redress
7. Pursue effective appropriate compensation, positive feedback loops and additionality and adaptive management.

d. Considerations for successful implementation, mainstreaming and scale-up NbS for reducing climate change and weather-related disaster risk⁵

1. Support development of a stronger evidence base and coordinate research efforts to close the knowledge gap, understanding what constitutes successful and sustainable NbS, how NbS can reduce climate change and weather-related disasters and how climate change affects the potential of NbS
2. Examine limitations of specific NbS measures based on each project context
3. Close capacity gaps, at all levels
4. Close the funding gap, including exploring private-sector innovations beyond carbon markets to support NbS financing for disaster risk reduction and climate change adaptation
5. Align and harmonize international, national and local policy, planning and legal frameworks on climate change, development, environment and disasters to promote harmonized approaches to resilience and risk reduction across sectors and ministries/departments
6. Promote models of engaging local communities and Indigenous Peoples in planning and implementing NbS as a standard
7. Recognize that the potential of NbS has limitations and therefore implement NbS as part of a package of disaster risk reduction, climate change adaptation and climate change mitigation interventions

e. Consideration for successful implementation of NbS in cities and urban areas⁶

1. For the implementation of NbS in urban contexts, a landscape approach must be taken that contemplates the peri-urban ecosystems that provide the city with ecosystem services to support urban resilience.
2. In cities and urban areas, social and ecological components need to be considered within an urban and peri-urban landscape - viewed as socio-ecological urban corridors - to support ecosystem function and key ecological processes that provide benefits for both people and nature and improve connectivity.
3. Understanding NbS as a planning tool to put people and nature at the center of urban planning. In cities and urban areas, especially small and rapidly expanding urban areas, urban planning and policy should avoid unplanned urban sprawl which can exacerbate resource consumption and inequality.

⁴ [Integrity principles for benefit sharing in forest NbS for climate mitigation](#)

⁵ [Working with Nature to Protect People: How Nature-based solution reduce climate change and Weather-related disaster](#)

⁶ [Urban Nature based Solutions - Cities Leading the way](#)

1.2.2. Methodology and indicators

Using the framing and adapted eight criteria of the IUCN Global Standard for NbS to design and assess NbS projects/interventions. All interventions must at the minimum provide information for all 5 aspects below to be listed as high quality:

1. Provide impact-oriented indicators towards a societal challenge
2. Ensure biodiversity and ecosystems benefits
3. Provide social and economic co-benefits
4. Guarantee safeguards for people and nature
5. Align with national and/or international policies

These aspects need specific indicators to measure its effectiveness and to keep track of the progress made with the intervention.

Indicators to track NbS progress on the ground

In order to track progress of projects, WWF has developed impact oriented indicators that show how we are addressing the following societal challenges: Climate change mitigation; Climate change Adaptation and Disaster Risk reduction (DRR); Food and Water security and Health.

Climate Change mitigation

1. Area of terrestrial or marine land under improved and effective management that contributes to green-house emission reductions. Please provide the answer in hectares
2. Carbon avoided by management and/or conservation. Please provide the answer in tons of carbon per hectare per year - baseline year
3. Achieved carbon emissions reductions and/or carbon sequestered from baseline year

Climate Change Adaptation & Disaster risk reduction

4. Extent of areas that reduce the vulnerability of people and local communities. Please provide the answer in hectares
5. Number of people and/or communities whose vulnerability is reduced. Please provide the answer in the number of people (men and women).
6. Please provide any description of the project's impacts related to vulnerability to hazards

Food Security

7. Type(s) of sustainable food production that are implemented to address food security
8. Number of people that have increased food security. Please provide which metric did you use to measure this indicator
9. Are you seeing an increase of quality of nutritious diets? Please provide the answer with a brief description of the methods used to record this
10. Have you seen a change in productivity or yields per area per season? Please provide the answer with a brief description of the methods used to record this
11. Which adopted food security-related practices are addressing food security? For example, agroforestry, etc.

12. Has the implementation of NbS has increased the resilience of indigenous food systems? If yes, please explain how?

Water Security

1. Water supplied or available from water bodies -including groundwater, aquifers, and baseflow restoration. Please provide the answer in m3
2. Pollution (nutrients) filtered - including water quality improvement and soil moisture regulation. Please provide the answer in m3
3. Invasive alien species retained. Please provide which metric you used to measure this indicator

Human Health

1. Net air and/or water quality increased: Please for air provide the answer in PM2.5 or PM10; and for water in temperature, acidity (pH), dissolved solids (specific conductance), particulate matter (turbidity), dissolved oxygen, hardness and suspended sediment
2. Increased green areas. Please provide the indicator in m2 of green area per person
3. Morbidity/fatalities reduced and/or health-related diseases reduced due to human-nature interactions - including wildlife encounters, hazardous jobs, etc. Please provide the answer in number of people (males and females)
4. Access to safe, inclusive and accessible green and blue public spaces. Please provide the answer in number of people (men and women)
5. Psychological and physical well-being increased. Please provide the answer in number of people (men and women)

Complementary to the indicators on the societal challenges:

Biodiversity benefits

1. Control of invasive species
2. Ecosystem connectivity
3. Ecosystem resilience to climate change
4. Habitat for species
5. Promote soil biodiversity
6. Protection of endangered and threatened species
7. Reduce ecosystem pollution
8. Reduced human-wildlife conflicts
9. Reduce illegal trade of species

Socioeconomic benefits

1. Empowering youth
2. Green jobs
3. Income generation
4. Increased productivity (goods and services)
5. Livelihoods diversification
6. Payment for ecosystem services
7. Recreational activities
8. Revalorization of cultural practices
9. Skills enhanced (training)

Safeguards

1. Stakeholders in the area of your project are engaged in the decision-making process at all levels?
2. Benefits of the project are distributed equitable to all the stakeholders?
3. Values and identities of all the stakeholders in the area of your project recognized during all the stages of the project?

Examples of identified high quality NbS interventions using this proposed model could be found in this High quality [NbS interventions Database](#)

2. Input to task 3 on *identifying options for supporting sustainable investment in nature-based solutions*

2.1. WWF Background documents

WWF submits the following reports as a source of input to “*identifying options for supporting sustainable investment in nature-based solutions*” task:

1. [Powering Nature. Creating the conditions to enable Nature based Solutions](#)
2. [Bankable Nature based Solutions](#)

2.2. WWF inputs to the UNEA process on task 3

WWF calls for a deep dive on a systemic enabling framework, as part of the consultations, to have the enabling conditions in place to implement high quality NbS at the global and national levels. WWF recognizes that supporting sustainable investment in nature-based solutions is key, but it is even more important that it is done alongside identifying structural barriers, policy levers and systemic enablers, that provide governments, decision makers, civil society and the private sector with a practical basis for integrating nature-based solutions into planning decisions at different scales and in multiple sectors.

Enabling conditions for high quality NbS interventions, a [systemic enabling framework](#)

The report focuses on three categories of structural barriers – sociocultural, institutional and economic (Figure 2) and presents a set of policy levers that are available to decision-makers to overcome these barriers, organized around three overarching categories of systemic enablers: inclusive governance, smart planning and progressive economic and financial regulation.

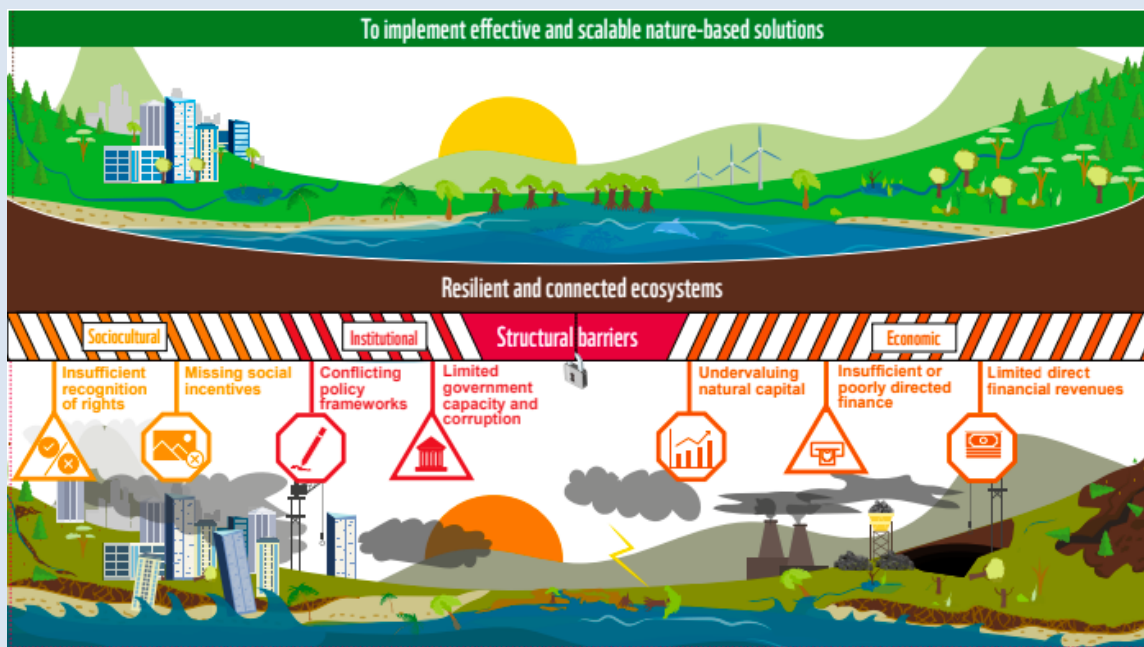


Figure 2: Structural barriers to the effective implementation, scaling and mainstreaming of nature-based solutions.

Policy actions to level the playing field for businesses and investors by showing the true cost of unsustainable practices in the global market:

- Analyze the environmental impacts of domestic activities on different ecosystems (e.g. food production, infrastructure development, transport networks).
- Integrate hidden environmental costs into prices and financial risk assessments.
- Remove subsidies for activities that drive land conversion and harm nature from domestic financing plans and actively repurpose the funds (see financing below).
- Regulatory initiatives to remove habitat-converting produce from supply chains.

Policy actions to incentivise and reward nature-based solutions:

- Determine the monetary and non-monetary values of the ecosystem services provided by intact landscapes, seascapes, watersheds and city corridors (e.g. via carbon accounting and multi-criteria modeling).
- Ensure transparent and equitable benefit-sharing agreements are drawn up with the participation of Indigenous peoples and local communities.
- Provide advice, training, funding and/or market access to help start-ups to scale up their activities (i.e. business incubation platforms).
- De-risk credit for practitioners that adopt nature-positive practices (i.e. food producers)

Policy actions to mobilize finance behind nature-based solutions:

- Analyze the up front investment needed for nature-based solutions at the landscape level and make recommendations for the deployment of public and private funds.
- Provide access to capital to support the sustainable management or rehabilitation of ecosystems (i.e. green investment bonds, microfinance loans).
- Repurpose finance that currently drives the conversion of nature, including lending for land clearance and environmentally damaging subsidies.
- Leverage additional and innovative sources of funding for nature-positive practices by facilitating collaborations across government, funders, sectors and practitioners.
- Calculate the societal benefits of investing or conserving NbS at the local level (e.g. urban wetlands or coastal buffers) as a justification for local/ national investment or as an incentive to build policies to ensure new projects or developments incorporate NbS

Policy actions to support the practical implementation of nature-based solutions:

- Integrate nature-based solutions into the main budgets of social development and other cross-cutting ministries and facilitate their implementation across different economic sectors with a common and long-term vision.
- Mainstream nature-based solutions within national and local governance and climate policy-related instruments including national development plans, Nationally Determined Contributions, and Multilateral Agreements.
- Conduct a climate vulnerability assessment of target ecosystems in the design phase of project development.
- Regulate to protect and sustainably manage green and blue infrastructure (i.e. ecological corridors, floodplains) and prevent conversion into new production lands.
- Make the inclusion of local and traditional knowledge, ecosystem services information (i.e. ecological connectivity data) and a climate-vulnerability assessment prerequisites for spatial planning decision-making.
- Ensure Indigenous peoples and local communities have access to financial resources, technologies and decision making processes, and remove discriminatory legal or institutional barriers.
- Require a diversified portfolio approach to managing risk from disasters (e.g. floods) that includes investment in ecosystems that mitigate the risk (i.e. wetlands, floodplains) alongside traditional engineered approaches.
- Require accurate valuations of ecosystem services and accounting methodologies for the systematic assessment of proposed changes in habitat use, including trade-offs and opportunities.
- Develop an inventory to showcase nature-based and hybrid solutions (combining engineered and nature-based solutions) as alternatives to traditional development and/ or provide technical assistance to promote uptake of new technologies.
- Increase investment in monitoring the performance of nature-based solutions (e.g. via weather stations, tide gauges, satellite imagery); standardized social and environmental indicators; target-setting and clear and consistent disclosure.
- Pilot NbS case studies in iconic settings, such as national parks, notable landmarks in cities or coastal landscape to build understanding and create buy-in.

For more information, contact:

Vanessa Morales
Senior expert, Climate & Nature
Climate and Energy Practice
WWF International
vmorales@wwfint.org



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