



RACE TO ZERO



©Tim Calver/TNC

NbS Implementation Dialogues

Summary Paper
November 2023

Introduction

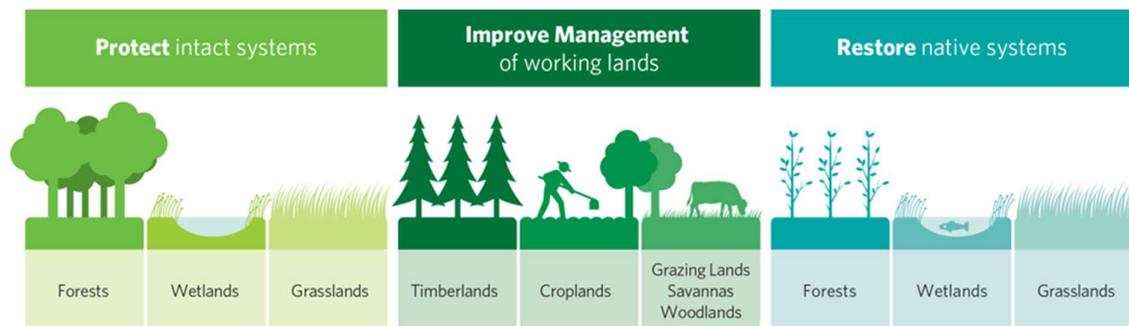
[Nature4Climate](#) coalition, [The Climate Champions Team](#) and the [COP28 Presidency \(Nature team\)](#), supported by IUCN and working with the UNFCCC have worked together to deliver the Nature-based solutions (NbS) Implementation Dialogues held at each of the four UNFCCC Regional Climate weeks. This paper draws together a high-level summary of insights gathered from NbS practitioners and stakeholders at these workshops. Supported by additional data collected by research carried out by Nature4Climate (N4C) and The Nature Conservancy (TNC).

This paper presents these insights with the intention to inform interventions and discussions at COP28.

1. To engage Ministers in an action-oriented discussion with other parties at the NbS Implementation Ministerial on the 4th of Dec.
2. To help inform the inclusion of NbS in the negotiations on the final Global Stocktake (GST) outcomes.
3. To guide future updates to nationally determined contributions (NDCs), national adaptation plans (NAPs) and national biodiversity strategies and action plans (NBSAPs).
4. To help inform future collaboration, cooperation, and partnerships to share knowledge, and technical support.
5. To unlock targeted resources to further advance NbS project pipeline development and delivery on the ground.

Background

NbS are an integral piece of the required global response for climate action. NbS can deliver affordable solutions for 1/3 of mitigation, critical for adaptation and are a useful tool to build resilience. The science is clear and numerous high-profile scientific publications have reported very large global or regional NbS biophysical potential.¹



Modified from graphical abstract in Griscom et al. (2019), <https://doi.org/10.1111/gcb.14612>, used under CC BY 4.0

Yet, the successful implementation of NbS can face many challenges, including political, economic, social, technical, financial, institutional, policy and governance factors that vary in scale from the local to the national.² Country-level analyses that consider even a select number of constraints find that the feasible NbS potential can be much lower than the biophysical or technological potential.³

¹ [Griscom et al. 2017](#); [Bastin et al. 2019](#); [Lal et al. 2018](#); [Roe et al. 2019](#); [Griscom et al. 2020](#); [Busch et al. 2019](#); [Drever et al. 2021](#); [Fargione et al. 2018](#); [Novita et al. 2022](#)

² [Bettles et al. 2021](#); [Schulte et al. 2022](#); [Novita et al. 2022](#); [Shyamsundar et al. 2022](#).

³ [Gopalakrishna et al. 2022](#); [Zeng et al. 2020](#)

Recognising the inclusion of NbS within Parties' international commitments, such as NDCs, NAPs and NBSAPs, and their commitment to increase ambition to align with the scale of the opportunity outlined by biophysical science.⁴ However, for the successful delivery of NbS implementation details need to be integrated into key national strategies and plans, regulations, budgets and guidance to ensure ultimately that the delivery meets the scale of ambition set out in NDCs.

NbS in national policies, budget, and regulations

For the past three years, N4C has been reviewing the national policies, regulations, and budgets of every country to facilitate NbS in its annual [NbS policy tracker](#).⁵

Top 10 policies globally by NbS pathway

Category	Percentage	Number of policies globally
Conservation Agriculture	32.46%	383
Natural Forest Management	30.85%	364
Avoid Forest Conversion	19.92%	235
Grazing	16.53%	195
Improved Plantation	13.31%	157
Reforestation	12.54%	148
Freshwater Conservation	12.37%	146
Grazing - Animal Management	11.78%	139
Coastal Restoration	11.19%	132

The key findings from a review of the 1,180 NbS policies from 188 countries contained in the N4C Global NbS database of policies to facilitate NbS are as follows:

- 549 (47%) policies mention science-based approaches.
- 412 (35%) policies have clearly allocated budgets.
- 419 (36%) of policies have references to adaptation.
- 254 (22%) of policies have specific reference to IPLC.
- 24 (2%) of policies have references to Gender Equity.

In December 2022, The Nature Conservancy, in collaboration with 16 partners,⁶ developed an online survey directed at managers of projects that implement at least one NbS for Climate.⁷ They found that four of the ten most frequently identified constraints are policy-regulatory-government related constraints (lack of policy coordination, unclear laws and policies related to NbS outputs or markets, uncertain enforcement of environmental laws, incentives for non-natural climate solutions land uses), with lack of policy coordination being the single most frequently mentioned constraint (identified by over half of all respondents). Two knowledge-related constraints (information about market access or prices,

⁴ Countries' NAPs and NBSAPs referred to NbS much more often and in more detail than NDCs did. For almost all countries, all three international commitments referred to agriculture- and forest related search terms (84%). NDCs also often referred to land use (55%), conservation (52%), and coastal zones (52%). NAPs referred mostly to conservation (83%), rivers (73%), protected areas (70%), and restoration (70%). NBSAPs referred mostly to conservation (94%), restoration (88%), protected areas (78%), ecosystems (75%), coastal zones (72%), rivers (69%), and wetlands (66%). [NbS Tracker](#) pg26, Nature4Climate, 2022

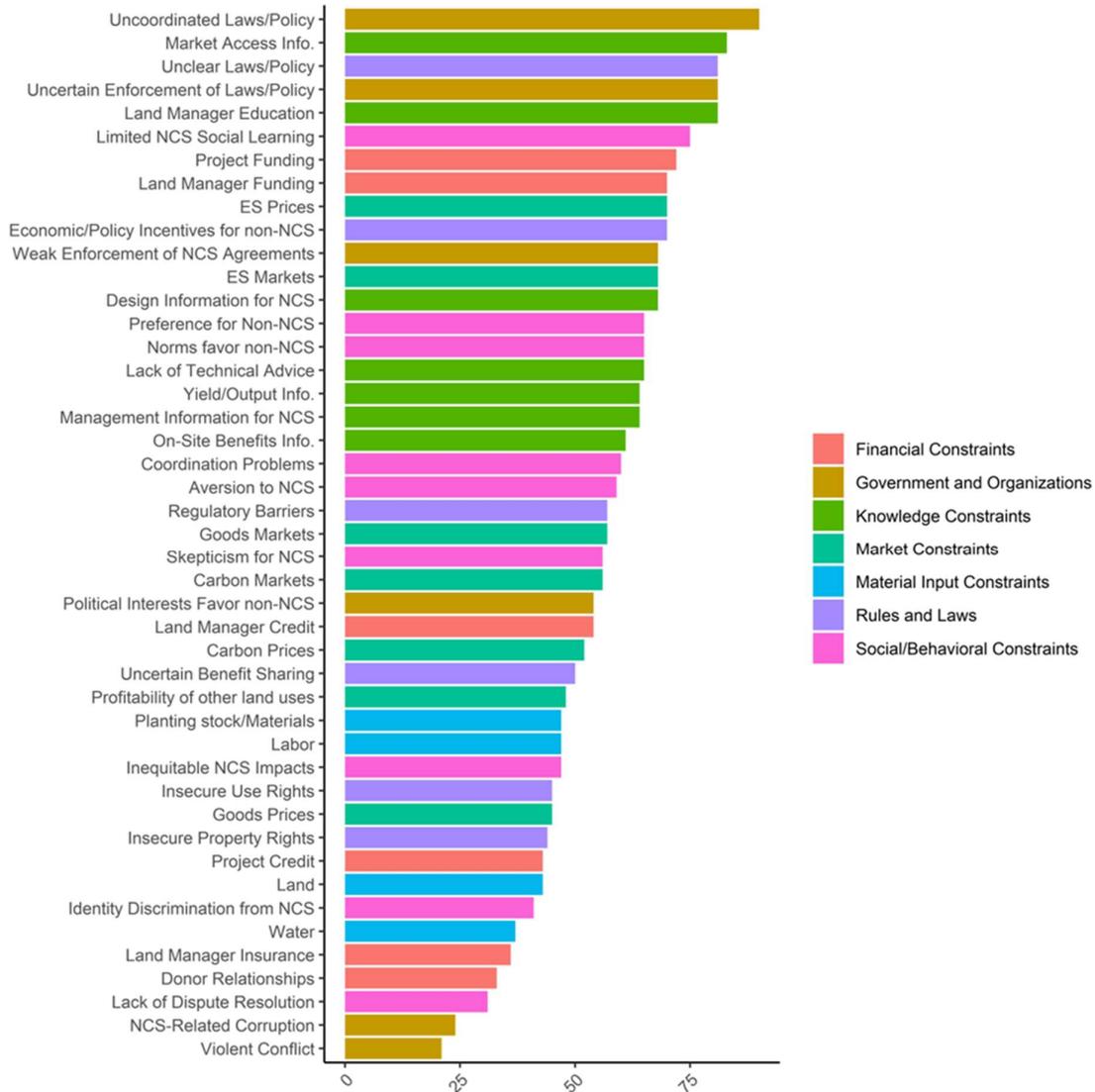
⁵ N4C NbS Policy Tracker - [2021](#), [2022](#) & [2023](#)

⁶ Survey partners: African Forest Forum, Catholic Relief Services, Center for International Forestry Research / World Agroforestry Center, Conservation International, EcoAgriculture Partners, Eden Reforestation Projects, Foundation for Ecological Security, Heifer International, International Centre for Integrated Mountain Development, Nature4Climate, One Acre Fund, Regreening Africa, Restor, Wildlife Conservation Society, World Resources Institute, World Wildlife Fund.

⁷ Kroeger, Timm and J.T. Erbaugh. Global survey of Natural Climate Solutions projects: Preliminary findings. The Nature Conservancy, November 2023.

land manager education) are among the top five constraints. Limited social learning networks for NbS, funding for projects themselves or for participating landowners, and low prices for ecosystem services round out the top ten constraints.⁸

The frequency counts for individual NbS constraints.



⁸ This survey was disseminated in December 2022 in English, French, Portuguese and Spanish. It remains open to allow additional projects to contribute data. The questionnaire presents respondents with a list of 46 constraints identified (with an option to add additional constraints) that span the full range of challenges projects may encounter. As of November 2023, we obtained 134 complete responses from 43 organisations. These responses cover 148 discrete projects in 45 countries. (Africa 21; Latin America Caribbean 12; Asia Pacific 7; North America 3; Europe 2)

NbS in the Global Stocktake Technical Submissions

In May, N4C employed the same AI machine learning, used for the NbS Policy Tracker, to analyse all 598 technical submissions in the Global Stocktake Portal. We extracted 186,491 NbS-related sentences from 526 individual Party submission documents. All the 183 Parties have at least one NbS topic mentioned (of 21 topics). From our analysis, we concluded that critical details regarding implementation plans, policy frameworks, and budgets were generally missing from the technical submissions. We believe this information is essential as part of the GST to better understand the state of NbS implementation alongside wider commitments to enhance ambition.

Based upon this evidence [Nature4Climate](#) coalition, [The Climate Champions Team](#) and the [COP28 presidency \(Nature team\)](#), supported by IUCN and working with the UNFCCC proposed to host NbS Implementation Dialogues at each of the four UNFCCC Regional Climate Weeks.

Regional NbS Implementation Dialogues

The NbS Implementation Dialogues Workshops were held at each of the four 2023 UNFCCC Regional Climate Weeks. The workshops were attended by over 150 participants who were representatives of Parties, non-state actors, and multilateral organisations. Participants were directly engaged in regional conversations about NbS implementation, considering the political, economic, social, and technological barriers that need to be overcome.

Political barriers

How to make NbS a political priority?

All regions discussed how to make NbS a political priority, as it was generally agreed that scaling up NbS would not be possible without political support and clear national policies with supporting regulations. One challenge discussed by both the Africa and Asia Pacific regions was that urbanization often takes political focus, while rural policy is perceived not to be a political priority. Emphasizing the economic benefits of NbS is critical. Participants agreed that increasing political knowledge and understanding of NbS among politicians and policymakers is a crucial strategy. This would also help overcome the perception among politicians that the benefits of these climate solutions would not be seen during their term in office. We need to make NbS delivery a selling point for political election cycles.

Need to help translate global policies into national strategies?

There was a perceived disconnect between global policies and national policies. It was felt that national NGOs and policymakers still needed help translating global policy into national strategies. Examples of where a better connection between global policies and local delivery was needed included changes to Voluntary Carbon Market integrity, CORSIA, and issues regarding nesting credits and making corresponding adjustments under Article 6.4.

How to increase inclusivity and accountability in decision-making on NbS?

In all regions, the need to ensure accountability for decision-making was evident to some extent in the context of their responses. Inclusivity was considered critical to ensuring that NbS can maximize the benefits they offer. However, like all large-scale projects, trade-offs are made, and these decisions need to be accountable. Increasing the knowledge of policymakers and politicians would help in this regard, but ensuring clear regulations and guidance for community and gender integration in decision-making is also essential. To achieve this, investment in the capacity and social skills of policymakers and decision-makers to effectively engage with local communities was identified as a priority.

How do we ensure good governance and policymaking?

All workshops concurred that having good governance is critical to delivering NbS effectively. Many participants expressed concerns that numerous countries lack effective policies, regulations, and guidance. This is particularly pressing concerning regulatory safeguards for NbS, such as regulations and guidance to enhance protections of land and tenure rights, as well as regulations for Free, Prior Informed Consent (FPIC) that can establish legal rights and participation protocols. Other governance issues raised included the absence of a clear, agreed definition of NbS and the lack of 'regionalization' of the NbS 'taxonomy.'

In general, it was felt that policymakers need to develop guidance on the adoption of clear standards for NbS implementation, referencing the criteria outlined in the IUCN NbS Standard.

Economic barriers

Need to overcome macro financial and policy barriers to funding NbS?

There is still a need to overcome macro financial and policy barriers to funding NbS. For instance, addressing Debt-for-Nature Swaps and establishing appropriate credit ratings is crucial. Efforts are still required to ensure deal flow for new landscape-scale projects with clear expectations for returns on investment and transparent benefit-sharing arrangements for communities. The level of understanding within the finance sector regarding Natural Capital and NbS investments remains low but is gradually increasing. Enhancing knowledge in this area will contribute to altering expectations of returns and shifting the global risk appetite for the commitment of capital to NbS projects.

What do we need to do to improve investments for NbS?

It was recognized that while investor interest is growing, there is still a need to improve communications regarding economic and wider benefits and returns. Much of NbS is currently valued based on carbon, and there is an acknowledgment of the need to find ways to better value NbS biodiversity and wider natural capital. This improvement would enhance the bankability and pricing of NbS projects and accelerate the effective scaling of finance for NbS. The role of the government was also acknowledged in ensuring that the impact and metrics of NbS are consistently applied across regions. Additionally, there is a need to find ways to integrate NbS into development portfolios and Overseas Development Assistance (ODA).

How do we increase finance flows at a project and community level?

All regions agreed that poor financial literacy and awareness of how to access finance for NbS were issues, coupled with a lack of access to appropriate local funding and the general need to increase access to finance for NbS. It was felt that, where governments and investors had funds, there was much work to be done to improve distribution to communities and ensure equitable benefit sharing.

To help communities make the financial case for projects and secure funding, it was recognised that there is a pressing need for funding for technological accessibility and technical support, especially in remote regions, for Monitoring, Reporting, and Valuation (MRV) to establish baselines and enable adequate resource allocation locally. Gathering measurements and metrics is essential for making decisions regarding effective NbS implementation.

Social barriers

How can we increase participation in and benefits from NbS projects?

Firstly, increasing awareness of NbS will result in higher participation. This must be supported by improved delivery of skills and training. These skills must include facilitation and specialists who can build local participation in planning and delivering NbS, aiming to maximize local benefits. This will not only ensure better community engagement but also create the means to help ensure that FPIC is followed. The most effective way to improve community participation and involve local enterprises is to ensure success in creating new and viable livelihood options that protect nature locally while providing communities with income.

How do we build capacity?

It was felt that education, training, knowledge, and information on NbS are often not easily accessible or overly reliant on the not-for-profit sector. There is a role for the government to collaborate with the education sector to ensure the right skills strategy is in place. This would help overcome technical delivery challenges and ensure effective management of NbS. In cases where skills are imported, such as consultants and project developers from the global north, there is a need to build capacity for cross-sectoral collaboration, including making more use of Indigenous knowledge and traditional cultural values. It was highlighted that there is a need to identify and fill local and regional data gaps based on good scientific knowledge, which could be addressed through targeted government and international research grants.

How do we build trust in NbS?

Building trust in NbS is critical for scaling up and delivering solutions at a level that can significantly impact climate action. It was noted across all workshops that there were perceived conflicting priorities that needed resolution, such as the involvement of the private sector and fair benefit-sharing at the local level, along with challenges related to tight project timelines and the need to engage in the full FPIC process.

Proposed solutions include incorporating clear inclusivity objectives in the planning, design, delivery, and benefits of NbS, ensuring awareness and enforcement of policies and regulations where they exist. Finally, it was emphasized that one of the most important roles for the government is to avoid further marginalization of Indigenous Communities, necessitating clear FPIC guidance for projects.

Technological barriers

How can we make technology more affordable?

A wider range of technologies was discussed, ranging from access to satellite and Lidar data to handheld MRV devices and drones. A common theme was the need to make technology more affordable. In the Africa workshop, participants felt that the challenge was the necessity for more technology development within the continent, especially technology that can be repaired locally. Challenges related to data for phones and access to the internet in rural areas were identified, as the available options can be expensive.

How do we improve the accessibility of the technology?

The primary focus is on the need to increase general knowledge and knowledge sharing among stakeholders and communities regarding NbS as a solution to many of the problems they are encountering. However, this also needs to include the sharing of the best available technologies appropriate to each location. It was observed that technology was not inclusive but often exclusive, particularly with data. This further made it challenging for communities to make informed decisions as part of an FPIC process.

The general level of knowledge about 'Nature Tech,' the technology to support NbS, was high across the workshops, but there was a recognised need to increase knowledge and access to the best available technology for practitioners at a local level. There were a couple of examples of technology that had failed to meet expectations, emphasizing the need for any technology to be appropriate for its application. Training was deemed critical to improving the capacity of projects. Developments in MRV and geospatial technology are seen as real opportunities to scale NbS but require investment in training for communities and farmers.

How do we improve available data and wider data collection and sharing?

The importance of integrated reporting at the local level, highlighting the conservation benefits of NbS, underscores the need to improve data accessibility. Often, there is a lack of available regional datasets. It was widely recognized that, despite the improvement and use of satellite data, there is still a lack of capacity for ground truthing and validation of remote sensing data. Additionally, integrating technology solutions using geospatial data remains challenging.

Summary of Individual Regional Implementation Dialogues

Africa Climate Week - Nairobi, Kenya

7/9/2023 (55 representatives attended)

<p>Political</p> <ul style="list-style-type: none"> - Focus on urbanization - rural policy not a political priority. - NbS may not be a political selling point for election cycles. - Perceived disconnection between global policies and national policies. 	<p>Economic</p> <ul style="list-style-type: none"> - Overcoming macro financial and policy barriers to funding NbS. - Poor financial literacy and awareness of how to access finance for NbS. - Lack of access to appropriate funding locally.
<p>Social</p> <ul style="list-style-type: none"> - Increased awareness of NbS. - Ensure better community engagement and that FPIC is followed. - Improved delivery of skills and training. 	<p>Technological</p> <ul style="list-style-type: none"> - Need to make technology more affordable. - Need to improve accessibility of technology for practitioners. - Need for improved technology appropriate to application. - Need to increase knowledge and training about best available technology.

LAC Climate Week - Panama City, Panama

26/10/23 (30 representatives attended)

<p>Political</p> <ul style="list-style-type: none"> - Issues related to governance such as a clear agreed definition of NbS and establish rights and participation protocols. - Need for the adoption of clear standards for NbS Implementation. 	<p>Economic</p> <ul style="list-style-type: none"> - Improved communications of economic and wider benefits. - Adequate resource allocation and metrics are crucial for effective NbS implementation. - The pressing need for technological accessibility and technical support especially in remote regions.
<p>Social</p> <ul style="list-style-type: none"> - Local participation in planning and delivery of NbS and need to maximise local benefits. - Overcoming technical delivery and effective management of NbS. 	<p>Technological</p> <ul style="list-style-type: none"> - The importance of NbS knowledge-sharing in addressing specific problems. - The significance of integrated reporting at the local level, spotlighting the conservation benefits of NbS.

MENA Climate Week - Riyadh, Saudi Arabia

9/10/23 (38 representatives attended)

<p>Political</p> <ul style="list-style-type: none"> - Inclusivity - community and gender integration in decision-making. - Lack of 'regionalization' of NbS 'taxonomy'. 	<p>Economic</p> <ul style="list-style-type: none"> - Bankability and pricing of NbS projects. - Integration of NbS into development portfolios.
--	--

<ul style="list-style-type: none"> - Lack of capacity in social skills to be able to engage with local communities effectively. - Lack of accountability and decision-making trade-offs. 	<ul style="list-style-type: none"> - Global risk appetite and long-term commitment. - Comparing NbS Impact and Metrics Across Cities. - Debt-for-Nature Swaps and Credit Ratings. - The Hyper Coupling of Biodiversity Loss to GDP.
<p>Social</p> <ul style="list-style-type: none"> - Need to build capacity to help cross-sectoral collaboration. - Making more use of Indigenous knowledge and cultural values. - Need to fill data gaps based on good scientific knowledge. - Conflicting priorities. - Awareness and enforcement of policies and regulations. 	<p>Technological</p> <ul style="list-style-type: none"> - Data accessibility and lack of available regional datasets. - Lack of capacity for ground truthing and validation of remote sensing data. - Lack of integration of technology solutions.

APCW - Johor, Malaysia

14/11/23 (33 representatives attended)

<p>Political</p> <ul style="list-style-type: none"> - Strengthen governance and support regulatory safeguards for NbS. - Increase political knowledge and understanding about NbS. - Better connection between global policies and local delivery for example VCM, CORSIA, nesting and corresponding adjustments. - Improve protections of land and tenure rights and regulation on FPIC. 	<p>Economic</p> <ul style="list-style-type: none"> - Need to increase access to finance for NbS. - Need to find ways to better value NbS. - Improve the distribution to communities of benefit sharing. - Need to accelerate the effective scaling of finance for NbS.
<p>Social</p> <ul style="list-style-type: none"> - Lack of viable livelihood options that protect nature. - Marginalisation of Indigenous communities need clear FPIC guidance. - Education, training, knowledge and information on NbS not accessible. - Need to increase inclusivity in plan, design, delivery and benefits of NbS. 	<p>Technological</p> <ul style="list-style-type: none"> - Inclusivity of technology solutions. - Affordability of technology. - Available of technology appropriate for its use.

Full summary notes written up from the dialogues can be provided upon request.

James Lloyd, Director, Nature4Climate James.Lloyd@Nature4Climate.org

Nady Mahmoud, Land Use Lead, Climate Champions nadymahmoud@climatechampions.team

CONCLUSION: A GAME-CHANGER

Mindful of the barriers to overcome and in anticipation of the 28th Conference of the Parties (COP28) of the United Nations Framework Convention on Climate Change (UNFCCC), the Nature4Climate Coalition has launched the beta version of naturebase on 27th November. This leading-edge online platform, designed for policymakers, practitioners, technical experts, and local communities, provides comprehensive tools and resources to identify, analyse, and make informed decisions on implementing high-integrity nature-based projects with substantial carbon mitigation impact, also enhancing livelihoods and safeguarding biodiversity.

While other natural climate solutions' existing platforms primarily focus on monitoring and reporting the progress of different ecosystems, naturebase sets itself apart by emphasizing the identification of opportunities across a variety of strategies – or pathways – to protect, restore, and sustainably manage nature to reverse nature loss and reduce the effects of climate change. This platform is set to represent the most extensive database of peer-reviewed science on natural climate solutions and allows users to assess the emissions reduction potential of various pathways on a global, national, and subnational scale.

Data collection and verification on naturebase integrates an array of novel data and information acquired through various technologies, including satellite data analysis and land system modelling, machine learning, and qualitative research. It meticulously assembles and validates existing knowledge rooted in peer-reviewed scientific research, presenting a comprehensive repository of information. This repository is further enriched with information on ecosystem and biodiversity advantages, impacts on human well-being, supportive policies, and illustrative case studies – creating a robust resource for decision-makers and climate advocates.

It also includes clear guidance on how to implement high-integrity projects, featuring a new Human Rights Screening Tool, which allows users to identify possible risks to Indigenous Peoples and local communities living in a certain area, as well as a compilation of reports and tools in accordance with the guiding principles of natural climate solutions – outlining that these should be nature-based, climate additional, sustainable, equitable and measurable.

The platform's capacity to offer access to policies and case studies also empowers and supports effective decision-making for climate action.

The new naturebase is a collaborative effort promoted by the Nature4Climate coalition and developed by global experts at The Nature Conservancy, Conservation International, the World Resources Institute, the Global Mangrove Alliance, and several other environmental sector organizations. It is an effort involving individuals from 59 universities, 21 research institutions, 18 NGOs, and 12 government agencies worldwide.

Naturebase will continue to evolve through inclusive participation and active engagement with stakeholders. This is why Nature4Climate and its partners invite the entire nature-positive community and interested parties to join this transformative initiative. Access www.naturebase.org to **learn more about how naturebase can accelerate the implementation of natural climate solutions on the ground and help overcome many of the barriers cited in this report.**