A policy paper series on the UN Decade on Ecosystem Restoration
Paper no. 4, October 2022

The role of ecosystem restoration for the UNFCCC and the Paris Agreement

Authors: Gregory Fuchs, Rebecca Noebel (Ecologic Institute)

Key messages

I The UN Decade on Ecosystem Restoration urges to prevent, halt and reverse the degradation of ecosystems worldwide to achieve climate goals. Ecosystem restoration is considered a "natural climate solution" since healthy ecosystems can make a crucial contribution to both mitigation and adaptation to climate change. The restoration of ecosystems can be an effective ecosystem-based adaptation and ecosystem-based disaster risk reduction and hence is one of the most powerful nature-based solutions to tackle climate change.

II Under the United Nations Framework Convention on Climate Change (UNFCCC) and in particular under the Paris Agreement (PA), the importance of restoration activities can be stressed in the following ways: countries can include restoration actions in their Nationally Determined Contributions (NDCs); restoration actions can be part of the REDD+ mechanism (Reducing Emissions from Deforestation and forest Degradation 'PLUS' the conservation, sustainable management and enhancement of forest carbon stocks); ecosystem restoration can receive more attention in the vulnerability and adaptation assessment of ecosystems in National Adaptation Plans (NAPs).

III To realise the adaptation potential of restoration, scaling up of finance is crucial. It includes increasing funding for adaptation in ongoing and new commitments and channelling funds to regional and national restoration and adaptation programmes and initiatives. Furthermore, blended finance approaches can be used to leverage private sector funding.

UNITED NATIONS DECADE ON ECOSYSTEM RESTORATION 2021-2030

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

On behalf of:
Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

In cooperation with:
eco logic

Introduction

Ecosystem restoration is a nature-based solution which can aid the reduction of greenhouse gases (GHG) thus mitigating further climate change (Griscom et al. 2017). Moreover, restored ecosystems are essential to help people and economic sectors adapt to and cope with the adverse impacts of climate change (Chausson et al. 2020). At the same time, ecosystem restoration benefits biodiversity, human well-being and sustainable development (Seddon et al. 2021). Restoring natural processes of ecosystems increases resilience which reduces the vulnerability socio-economic system to climate change impacts like extreme weather events (Morecroft et al. 2019; Seddon et al. 2020). In turn, the degradation of ecosystems compounds vulnerability (**Figure 1**; Kapos et al. 2019). Restoration is hence considered a crucial ecosystem-based adaptation (EbA)[1] and/or Ecosystem-based disaster risk reduction (Eco-DRR)[2] approach (Donatti et al. 2020). Restored ecosystems can act as "natural climate solutions", especially forests or so-called blue carbon ecosystems such as mangroves, seagrass beds and tidal marshes. These ecosystems store enormous amounts of carbon, while also offering goods and services which increase societal resilience and adaptation to climate change, e.g. through coastal protection, food security and watershed regulation (**Figure 2**).

The 6th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) emphasises that natural ecosystems will struggle to adapt, even at 1.5°C of warming, with high risks of biodiversity decline, mortality, species extinctions, and loss of related livelihoods.

At the same time, the report urges the restoration of degraded ecosystems, especially degraded wetlands and rivers, forests and agricultural ecosystems, to prevent and reduce the impacts of climate change, as well as being an important adaptation option (Pörtner et al. 2022).

Running from 2021 until 2030, the UN Decade for Ecosystem Restoration builds a global movement to restore ecosystems worldwide. Effective restoration[3] supports the achievement of the goals of the Rio Conventions and related global initiatives, including the 1992 United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC and its subsequent treaties – including the Kyoto Protocol (KP) and the Paris Agreement (**Figure 3**[4]) – provide an international legal structure through which Parties (signatory countries) seek to reduce GHG emissions and adapt to climate change. As part of the Paris Agreement, Parties are required to prepare Nationally Determined Contributions (NDCs), which outline and communicate their post-2020 climate actions. Following their first NDCs and in line with the requirement to update them every five years, representing a progression compared to the previous NDC, many Parties submitted their second iterations from 2020 onwards (**Figure 4 and 5**; UNFCCC, 2022).

[1] Ecosystem-based adaptation (EbA), "the use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people adapt to the adverse effects of climate change" (CBD, 2009).

[2] Ecosystem-based disaster risk reduction (Eco-DRR), "the sustainable management, conservation, and restoration of ecosystems to reduce disaster risk, with the aim of achieving sustainable and resilient development" (Estrella & Saalismaa, 2013).

[3] The evidence base on the effectiveness of ecosystem restoration interventions has been growing, 108 studies examined their effectiveness to address climate impacts by 2020; however, challenges and uncertainties remain in predicting their socio-ecological (e.g. in delivering a specific climatic adaptation benefit) and cost-effectiveness compared to alternatives (Chausson et al. 2020).

[4] Figure 3 provides a visual overview of the key policy developments relevant for restoration under the UNFCCC in chronological order.

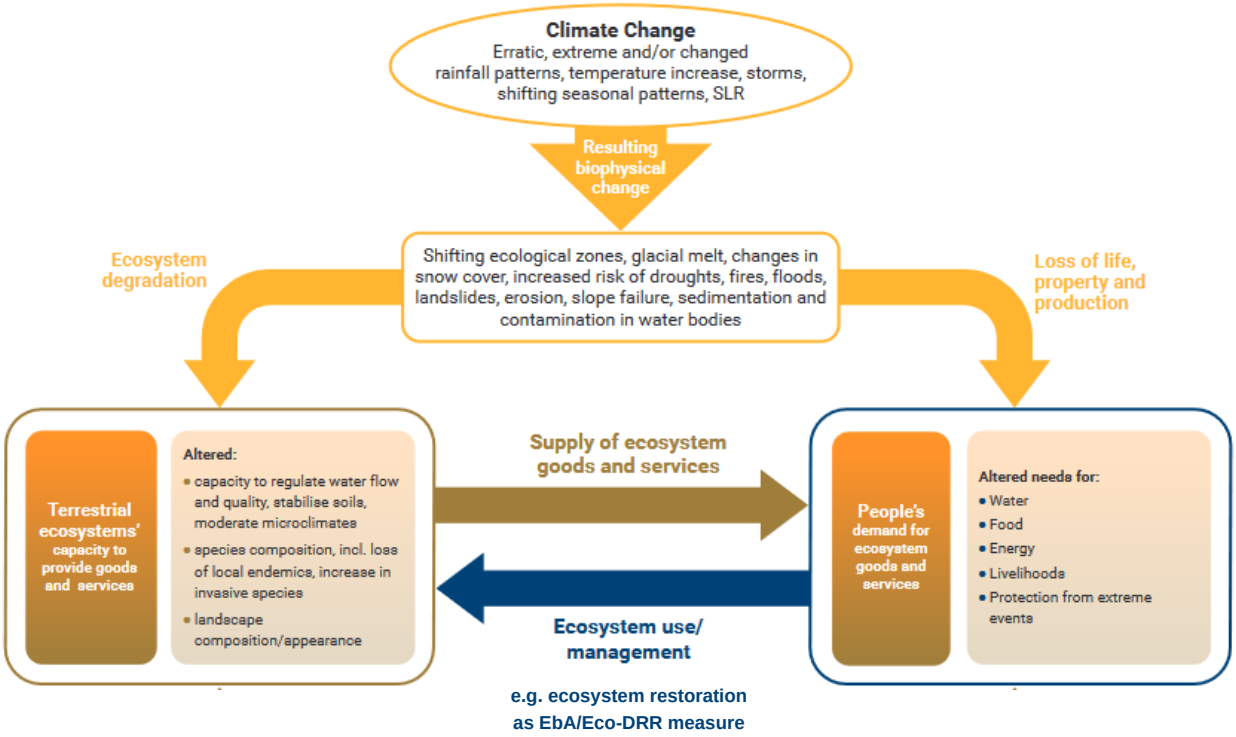

Figure 1

Schematic diagram showing how aspects of climate change (top oval) have numerous biophysical impacts, which can directly affect ecosystems (leading to ecosystem degradation) and people (causing loss of life, property, and livelihoods). They can also trigger indirect impacts: climate-induced degradation reduces the ecosystem's capacity to provide goods and services to people. In turn, sustainable use, management and restoration of ecosystems (alongside other ecosystem-based or ecosystem-based disaster risk approaches), can increases the capacity of ecosystems to provide services to support resilient societies able to adapt better to a changing climate and other impacts (Figure adapted from Kapos et al. 2019). Author remarks: this cycle also applies to marine ecosystems, although the alterations in response to degradation are partly different from those shown here in the model. The dimension of non-climatic degradation processes of ecosystems and reduction of wellbeing was excluded for this brief.

Figure 2

Mangrove forests are a well-studied example of the adaptation benefits of ecosystem restoration. Healthy mangroves can act as a powerful barrier against tsunamis and can lower wave heights by 5 - 30% (Spalding et al. 2014). For example, in the Philippines, mangrove restoration could prevent flooding that would harm more than 267,000 people and cost USD 450 million annually (Menéndez et al. 2018).

Policy Context

For several years, ecosystem restoration has gained the interest of international policy makers for reducing climate impacts but at the same time supporting people's adaptation to climate change.[5] The UNFCCC recognises the importance of biological systems by stating that climate change should be arrested in a time frame that allows ecosystems to "adapt naturally" to climate change (Article 2).

Defined under Article 12 of the Kyoto Protocol, the Clean Development Mechanism (CDM) has been a key tool for restoration to support climate change mitigation and adaptation under the UNFCCC. CDM was an international carbon finance scheme in which countries with carbon emission reduction targets implement emission reduction projects in developing countries. This allowed a portion of emission reduction credits to come from afforestation and reforestation (A/R) projects to address the challenge of climate change. The inclusion of land use, land use change and forestry (LULUCF) projects under the CDM was restricted to (A/R) projects in 2001 (also the REDD concept, see further below, was removed from LULUCF; **Figure 3**) but is still seen as a means of encouraging 'climate friendly' land use which is relevant for restoration and can provide co-benefits for climate change adaptation. However, CDM has been facing severe crises since its inception. Adoption of tree planting projects to date has been much lower than anticipated: forest carbon credits were costlier and traded at a third of the volume of credits from REDD+ projects in 2014 (Schirmer & Bull 2014) and by 2022 only 0.75% of CDM project activities came from afforestation and reforestation (Muthyanolla, 2022).

Like the CDM, Reducing Emissions from Deforestation and Degradation (REDD) is a carbon mitigation mechanism within the UNFCCC framework. The concept has evolved from REDD to REDD+ (**Figure 3**) which is a global fund- or credit-based mechanism for safeguarding forest ecosystems by sequestering carbon. REDD+ has strong parallels with the different yet complementary mechanism of Forest Landscape Restoration (see Policy Paper 3), while at the same time being strongly interlinked and synergistic (Mansourian et al. 2022). For example, REDD+ action to preserve or restore carbon-rich mangrove forests can help with both climate change mitigation and adaptation while also promoting biodiversity and assisting coastal communities in coping with the effects of rising sea levels and storms (McElwee et al., 2016). Although ecosystem restoration is not explicitly mentioned in REDD+, several reviews of subnational REDD+ activities show that restoration features prominently in projects (de Sassi et al. 2014; Panfil and Harvey 2016). The inclusion of sustainable management and carbon-stock enhancement has provided significant new opportunities to receive REDD+ funding for forest restoration projects and programs that reduce emissions, sequester carbon, and provide important benefits to communities and biodiversity (Mansourian et al., 2022; Alexander et al. 2011).

The Paris Agreement marked a critical point for REDD+. The PA's ambitious goal of limiting global warming to 1.5 degrees and its recognition of the role of forests in achieving this goal have given new impetus to international efforts to combat deforestation, forest degradation and forest restoration. To meet the goals of the Paris Agreement, countries communicate the actions they will take to reduce their greenhouse gas emissions in their NDCs. Additionally, they outline the steps they will take to build capacity for adaptation to the impacts of climate change. Ecosystem restoration and other NbS can significantly contribute to national climate mitigation efforts and should therefore be included in NDCs. Measures specifically directed to climate mitigation are also called natural climate solutions (NCS) and according to estimates could provide 37% of cost-effective CO2 mitigation needed through 2030 (Griscom et al. 2017). A comparative analysis of 167 NDCs of the first iteration has shown that the majority (around 66%) already included NbS in some form (Figure 4; Seddon et al. 2020; Seddon et al. 2019). However, most of them were not sufficiently quantified with evidence-based targets (only 20% in the forestry sector).[6] A second round of analysis was undertaken based on 122 new NDCs submitted until the end of 2021. Results show that the number of NDCs mentioning NbS increased, as well as the mentions within the NDCs, especially in the context of adaptation (e.g. increase of resilience and protection against extreme events) and its synergies with mitigation (Figure 5; University of Oxford 2022). Major potential is still identified for ecosystems other than forests, especially grasslands, wetlands or montane habitats.

[5] Implementation of NbS for adaptation has been growing strongly since the early 2000s (UNEP, 2021a). As for restoration, this is reinforced on a regional level by a new EU legislative proposal on Nature Restoration (EC, 2022).

[6] As an example, the Brazilian NDC included the target of restoring and reforesting 12 million hectares of forests for multiple uses by 2030 (Bustamante et al. 2019).

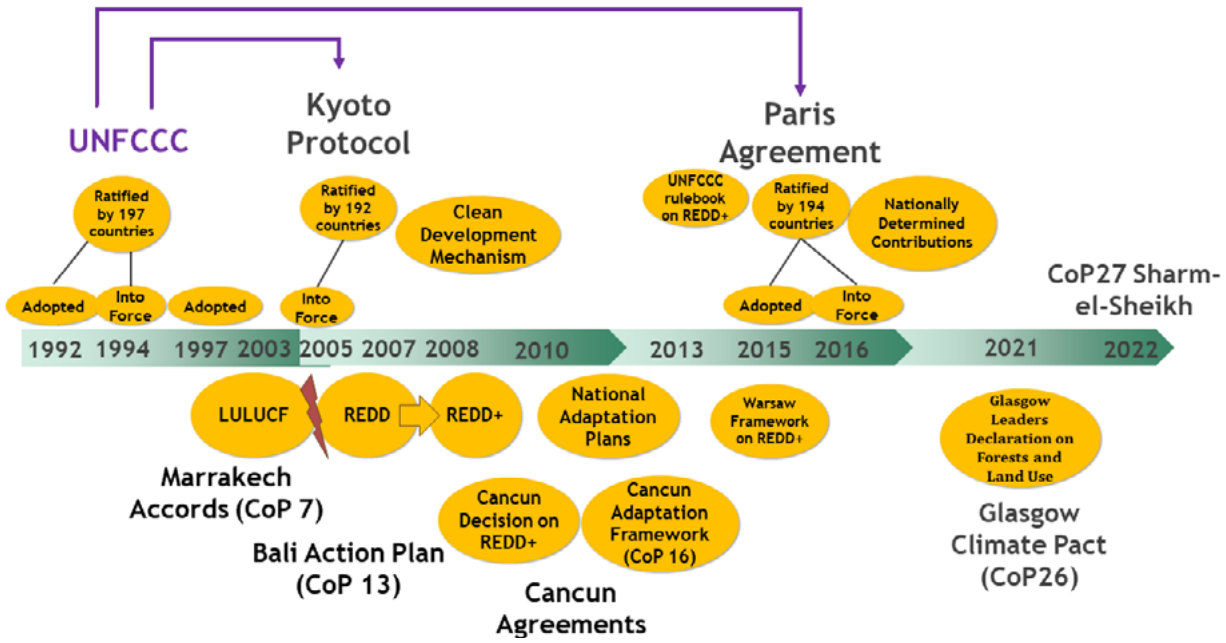

Figure 3

The UNFCCC is the primary international climate agreement that serves as the institutional framework of the climate regime. It is complemented by the Kyoto Protocol and the Paris Agreement. The Kyoto Protocol, signed in 1997, and its later amendments created two commitment periods (2008 to 2012 and 2013 to 2020) and marked the first implementation of quantified emission reductions under the UNFCCC. Industrialized countries and economies in transition that ratified the KP committed to limit and reduce their GHG emissions. Provisions of the KP also required Parties to adapt to the adverse effects of climate change. The seeds for REDD were planted under LULUCF in the KP. The Marrakesh Accords then split REDD from LULUCF in 2003 and the idea of REDD as a standalone mechanism became formal at COP13 in Bali in 2007. In the Cancun Agreements of 2010 emerged the Cancun Decision which added the "plus" to REDD+ as well as launching the National Adaptation Plans. In 2013, the Warsaw Framework added seven more decisions on REDD+. In 2015, the Paris Agreement consolidated the outstanding decisions on REDD+ into one set of rules and at the same time marked the introduction of the NDCs.

As reinforced in the 2020 Adaptation Gap Report, restoration should be a key component of all national climate change adaptation strategies and National Adaptation Plans (NAPs), as well as NDCs (UNEP 2021a). This is also supported by a recent National Adaptation Plan Global Support Programme (NAP-GSP) release of supplementary guidelines on integrating ecosystem-based adaptation, including restoration, into NAPs (UNEP, 2021b).

In November 2021, at the Conference of the Parties to the three treaties UNFCCC (COP26), KP (CMP13), and PA (CMA4), the NbS concept was part of the discussions on meeting the 1.5-degree target of the PA. However, in the last hours of the CoP26 talks, the term „nature-based solution" was omitted from the cover decision documents, the Glasgow Climate Pact. The Pact now highlights the importance of ecosystem restoration for addressing climate change, recognising "the interlinked global crises of climate change and biodiversity loss, and the critical role of protecting, conserving and restoring nature and ecosystems in delivering benefits for climate adaptation and mitigation, while ensuring social and environmental safeguards" (UNFCCC/PA, 2021). Conservation and restoration of forest ecosystems was recognised as a particularly important NbS. On the sidelines of the climate negotiations, the Glasgow Leaders Declaration on Forests and Land Use was signed by 142 governments (incl. countries with major tropical forest reserves such as Brazil or the Democratic Republic of Congo), which account for more than 90% of the global forest area. The Declaration is underpinned with concrete commitments and pledges for significant forest-related climate finance. In this respect, the discussions at and around COP26 showed pivotal progress on forest conservation and – so one could suggest – for NbS in a broader sense.

However, the stark focus on forests also carries the risk of a shift from deforestation to the destruction of other ecosystems.

Restoration is likely to play an important role at COP27 as it is going to be chaired by Egypt, and taking place on the African continent which is the most vulnerable to the consequences of the climate crisis (Pörtner et al. 2022), but also bears great potential for ecosystem restoration.[7] More than 30 African countries, already have extensive commitments and projects with the AFR100 initiative aiming for 100 million hectares under restoration by 2030 and the Green Wall Initiative (GGW) under which almost 30,000 hectares of lands have already been restored (UNCCD, 2020). The African Union (AU) has announced plans to further extend the GGW to the Southern African Development Community (SADC) region, aiming to reverse land degradation and increase the resilience of vulnerable communities to climate change impacts in arid lands. Moreover, during COP26 African ministers launched the challenge of raising $2 billion in investable capital by COP27 (AFR100, 2021).

[7] The African continent has an enormous restoration potential of 700 million hectares of degraded land that can be restored (Mansourian & Berrahmouni, 2021.)

Nature-based solutions in Nationally Determined Contributions (Figure 4 and 5)

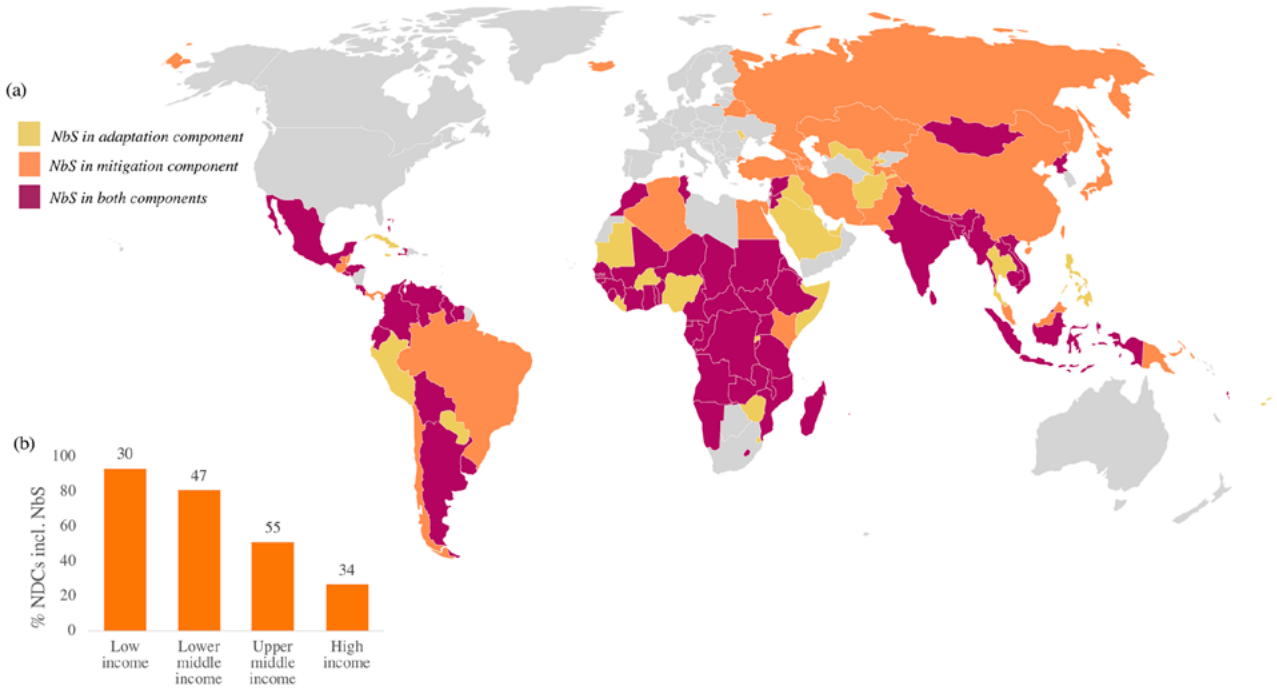

Figure 4 shows NbS in first iteration of NDCs (Seddon et al. 2020):

(a) Global distribution of nations that included nature-based solutions (ecosystem-based adaptation and/or conservation) in the adaptation and/or mitigation component of the first iteration of their Nationally Determined Contribution (NDC).

(b) The percentages of NDCs from nations from each of the four World Bank income groups that included nature-based solutions in their adaptation components (numbers above bars show how many nations fall within that income group).

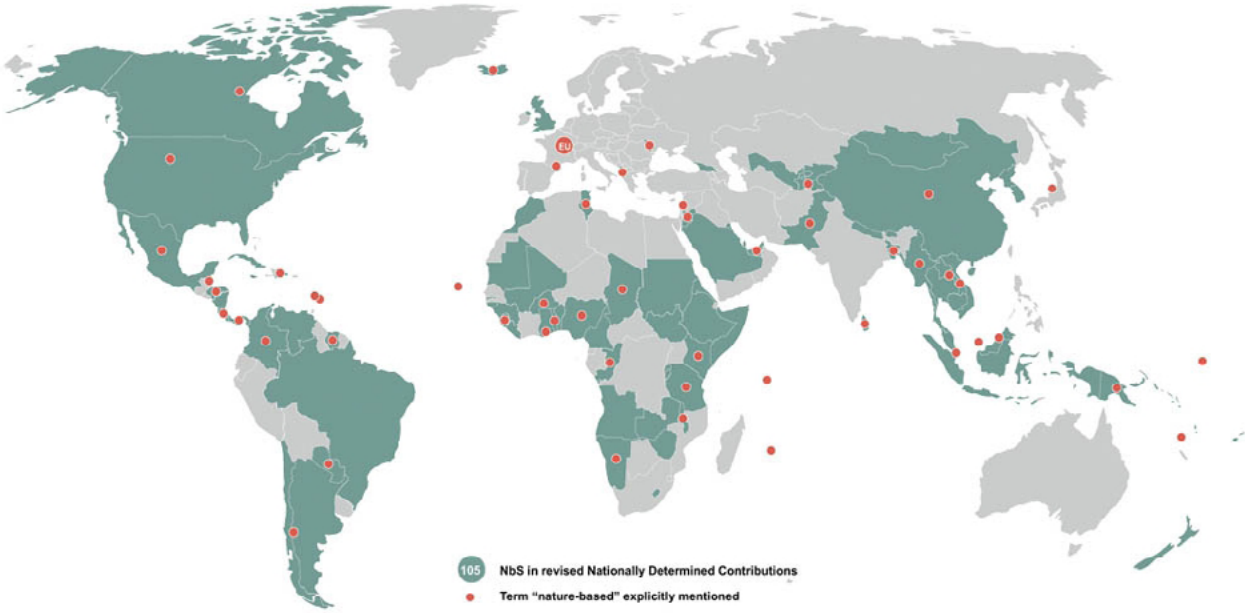

Figure 5 shows NbS in second iteration of NDCs (University of Oxford 2022):

A total of 102 nations – or 84% of all updated NDCs – commit to **restoring** or protecting ecosystems or implementing nature-based agriculture such as agroforestry. Of these, 96 include NbS in their adaptation plans, 45 in both adaptation and mitigation components, 3 in just their mitigation plans and 3 elsewhere in the NDC. This is an increase from 78% of the first round NDCs. Moreover, 41% of all revised NDCs (50 countries) explicitly used the term 'Nature-based Solutions', and an additional two mentioned 'nature-based' actions or interventions. No country in the first round of NDCs used the term.

Policy Recommendations

- Firmly **anchoring restoration (as well as the term NbS) in the upcoming UNFCCC COP 27** discussions and proceedings of Sharm el-Sheikh to leverage the enormous potential of restoration for adapting to a world increasingly affected by accelerating climate change. It would also be a very good opportunity to link the objectives of the CBD, the UNCCD and the UNFCCC more closely (see Policy Paper 1).

- Using COP27 to identify opportunities for **scaling of finance**. This can be done by e**xploring new donor coalitions** (including **mobilisation of private and philanthropy investment**) and encouraging a shift in the financial sector, where ecosystem-related climate risks should be considered an important investment criterion. Progress and transparency on the COP27 agreement will mean stacking up on international finance for adaptation through delivery of funds to country-led programmes of the most vulnerable, including on the African continent. Delivering on the COP26 agreement for developed countries to double adaptation funding by 2025 with a transparent implementation plan is central to unlocking the full potential of adaptation action in Africa and around the globe. It is also a critical enabler for ecosystem restoration action to cope with climate impacts.

- Using the **UN Decade for Ecosystem Restoration** as an argument for scaling up: now is the Decade of Action and the time to act, reinforced by the same timeframe of the UN-Decade and that to the climate goal: 2030.

- Strengthening the ambition of **future NDCs** to include NbS (including restoration), e.g. by supporting the establishment of methodologies for evidence-based targets to quantify NCSs/NbSs, for instance with regard to forest restoration.

- Integrating restoration more concretely into adaptation planning at all levels (e.g. across different ecosystems and regions) and across all sectors in the **NAP process**.

- Making ecosystem restoration an **integral and explicit part of REDD+** to open up additional funding.

- Highlighting positive implementation experiences at high-level events to demonstrate that investing in restoration is worthwhile. Effective **communication of the advantages of ecosystem restoration** and other NbS compared to conventional engineered solution such as "grey infrastructure" needs to be scaled up in forms that are appropriate and accessible to decision-makers and investors. Raising awareness on ecosystems with high GHG storage capacity as well as climate adaptation potential other than forests (for example, peatlands, mangroves and grasslands) is important to increase their protection and avoid the shift of ecosystem degradation.

Conclusion

Compared to conventionally engineered solutions, ecosystem restoration offers a wide range of adaptation benefits. This reduces vulnerability of local communities and creates resilience (e.g. preventing (natural) disasters, creating diversified sources of income, improving food security and health, access to water). However, these advantages are not yet sufficiently considered in decision-making processes due to siloed approaches and a lack of awareness. To realize the adaptation potential of restoration and other NbSs scaling up finance and increasing implementation in this UN Decade on Ecosystem Restoration is crucial. It is also key to weave restoration stronger into existing tools (NDCs, NAPs, REDD+, etc.) while continuing to commit to strong GHG emission reduction. Furthermore, applying NbS such as ecosystem restoration can strengthen synergies between the UNFCCC and other Rio Conventions and help to tackle the climate and biodiversity crises at the same time.

References

Afr100.org. (2022). RELEASE: AFR100 Issues COP27 Challenge to Mobilize $2 Billion for Africa's Locally Led Land Restoration Movement | AFR100. [online] Available at: https://afr100.org/content/afr100-issues-cop27-challenge (accessed 13 October 2022)

Chausson, A., Turner, B., Seddon, D., Chabaneix, N., Girardin, C. A., Kapos, V., ... & Seddon, N. (2020). Mapping the effectiveness of nature based solutions for climate change adaptation. Global Change Biology, 26(11), 6134-6155.

De Sassi, C., Sunderlin, W. D., Sills, E. O., Duchelle, A. E., Ravikumar, A., Resosudarmo, I. A. P., ... & Atmadja, S. S. (2014). REDD+ on the ground: Global insights from local contexts. In REDD+ on the ground: A case book of subnational initiatives across the globe (pp. 420-439). Center for International Forestry Research (CIFOR).

Donatti, C. I., Harvey, C. A., Hole, D., Panfil, S. N., & Schurman, H. (2020). Indicators to measure the climate change adaptation outcomes of ecosystem-based adaptation. Climatic change, 158(3), 413-433.

European Commission, 2022. Proposal for a regulation of the European Parliament and of the council on nature restoration. Available at: https://environment.ec.europa.eu/system/files/2022-06/Proposal%20for%20a%20Regulation%20on%20nature%20restoration.pdf. (accessed 08 October 2022)

Estrella, M., & Saalismaa, N. (2013). Reduction (Eco-DRR): an overview. The role of ecosystems in disaster risk reduction, 26.

Spalding, M., Mcivor, A., Tonneijck, F., Tol, S., & Eijk, P. V. (2014). Mangroves for coastal defence.

Griscom, B.W., Adams, J., Ellis, P.W., Houghton, R.A., Lomax, G., Miteva, D.A., Schlesinger, W.H., Shoch, D., Siikamäki, J.V., Smith, P. and Woodbury, P., 2017. Natural climate solutions. Proceedings of the National Academy of Sciences, 114(44), pp.11645-11650.

IIED (2018) Nature-based solutions delivering national-level adaptation and mitigation goals. IIED briefing papers. Available at: http://pubs.iied.org/pdfs/17484IIED.pdf. (accessed 03 October 2022)

Kapos, V., Wicander, S., Salvaterra, T., Dawkins, K., Hicks, C. 2019. The Role of the Natural Environment in Adaptation, Background Paper for the Global Commission on Adaptation. Rotterdam and Washington, D.C.: Global Commission on Adaptation. Available at: https://gca.org/wp-content/uploads/2020/12/RoleofNaturalEnvironmentinAdaptation_V2.pdf (accessed 03 October 2022)

Mansourian, S., & Berrahmouni, N. 2021. Review of forest and landscape restoration in Africa. Accra. FAO and AUDA-NEPAD. Available at: https://doi.org/10.4060/cb6111en (accessed 13 October 2022)

McElwee, P., Thi Nguyen, V. H., Nguyen, D. V., Tran, N. H., Le, H. V. T., Nghiem, T. P., & Thi Vu, H. D. (2016). Using REDD+ policy to facilitate climate adaptation at the local level: synergies and challenges in Vietnam. Forests, 8(1), 11.

Menéndez, P., Losada, I. J., Torres-Ortega, S., Narayan, S., & Beck, M. W. (2020). The global flood protection benefits of mangroves. Scientific reports, 10(1), 1-11.

Morecroft, M. D., Duffield, S., Harley, M., Pearce-Higgins, J. W., Stevens, N., Watts, O., & Whitaker, J. (2019). Measuring the success of climate change adaptation and mitigation in terrestrial ecosystems. Science, 366(6471), eaaw9256.

Muthyanolla, S. and Muthyanolla, S., 2022. Review: What is the status of Clean Development Mechanism (CDM) projects?. [online] FACTLY. Available at: https://factly.in/review-what-is-the-status-of-clean-development-mechanism-cdm-projects/ (accessed 06 October 2022)

Panfil, S. N., & Harvey, C. A. (2016). REDD+ and biodiversity conservation: A review of the biodiversity goals, monitoring methods, and impacts of 80 REDD+ projects. Conservation Letters, 9(2), 143-150.

Pörtner, H. O., Roberts, D. C., Adams, H., Adler, C., Aldunce, P., Ali, E., ... & Stevens, N. (2022). Climate change 2022: impacts, adaptation, and vulnerability. Contribution of working group II to the sixth assessment report of the intergovernmental panel on climate change. https://www.ipcc.ch/assessment-report/ar6/ (accessed 04 October 2022)

Schirmer, J., & Bull, L. (2014). Assessing the likelihood of widespread landholder adoption of afforestation and reforestation projects. Global Environmental Change, 24, 306-320.

Seddon, N., Sengupta, S., García-Espinosa, M., Hauler, I., Herr, D. and Rizvi, A.R. (2019). Nature-based Solutions in Nationally Determined Contributions: Synthesis and recommendations for enhancing climate ambition and action by 2020. Gland, Switzerland and Oxford, UK: IUCN and University of Oxford.

Seddon, N., Daniels, E., Davis, R., Chausson, A., Harris, R., Hou-Jones, X., ... & Wicander, S. (2020). Global recognition of the importance of nature-based solutions to the impacts of climate change. Global Sustainability, 3.

Seddon, N., Smith, A., Smith, P., Key, I., Chausson, A., Girardin, C., ... & Turner, B. (2021). Getting the message right on nature-based solutions to climate change. Global change biology, 27(8), 1518-1546.

Seddon, N. (2022). Harnessing the potential of nature-based solutions for mitigating and adapting to climate change. Science, 376(6600), 1410-1416.

UNEP (2021). Adaptation Gap Report 2020. Nairobi. Available at: https://wedocs.unep.org/bitstream/handle/20.500.11822/34721/AGR2020.pdf (accessed 05 October 2022)

UNEP (2021b). Guidelines for Integrating Ecosystem-based Adaptation into National Adaptation Plans: Supplement to the UNFCCC NAP Technical Guidelines. Nairobi. Available at: https://unfccc.int/sites/default/files/resource/EbA_NAP.pdf

UNCCD. (2020). The Great Green Wall implementation status and way ahead to 2030 advanced version. Bonn, Germany: United Nations Convention to Combat Desertification. Available at: https://catalogue.unccd.int/1551_GGW_Report_ENG_Final_040920.pdf

UNFCCC (2022). The Paris Agreement and NDCs. Available at: https://unfccc.int/ndc-information/nationally-determined-contributions-ndcs (accessed 06 October 2022)

UNFCCC/PA (UN Framework Convention on Climate Change) 2021. Outcomes of the Glasgow Climate Change Conference - Advance Unedited Versions (AUVs) UN Campus Bonn, Germany. Available at: https://unfccc.int/sites/default/files/resource/cop26_auv_2f_cover_decision.pdf (accessed 06 October 2022)

University of Oxford (2022). Revised climate pledges show enhanced ambition for nature-based solutions. Available at: https://www.nature-basedsolutionsinitiative.org/news/nbs-policy-platform-ndc-submissions/ (accessed 06 October 2022)

Imprint

Published by:
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

Friedrich-Ebert-Allee 32 + 36
53113 Bonn
Germany
T +49 228 44 60-0
E info@giz.de
I www.giz.de

Bonn, 2022

Responsible:
Project "Support for the Design and Implementation
of the UN Decade on Ecosystem Restoration"

Photo credits:
Page 1: B. Kosztra / Copernicus.eu
Page 3: D. Clode / Unsplash